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Psychiatric disorders

Introduction

In recent years, social, economic, and professional developments have dramatically changed the mental health field. For instance, community and professional organizations have established family advocacy programs, substance abuse rehabilitation programs, stress management workshops, bereavement groups, victim assistance programs, and violence shelters. The public education system has established widespread information programs about mental health issues. Mental illness isn't as much of a stigma as it once was. Self-help and coping books have proliferated, and media attention to mental and emotional disorders has increased. Finally, more effective drugs are available to treat many of these illnesses.

Social changes

Today, more people than ever experience mental health problems. Some researchers blame social changes, which have altered the traditional family structure and contributed to the loss of the extended family. The result: more single parents, dysfunctional families, troubled children, and homeless people.

The loss of effective support systems strains a person's ability to cope with even minor problems. For example, a working mother may lack the needed support to meet the demands of her job, her home, her spouse, and her children. When she views herself as ineffective in these roles, her self-esteem falters and her level of stress intensifies.

Alcohol and substance abuse are also increasing, particularly among younger people. Up to 7% of adolescents are dependent on alcohol, and 15% to 20% of American teens have experienced a serious episode of depression. Isolation, fear of violent crime, and loneliness have contributed to a similar rise in depression among elderly people. Victims of violence, abuse, and social discord struggle to cope with the trauma they have experienced.

Economic forces

Cuts in Federal funding of mental health programs place future control of mental health services in the hands of state and local authorities, drastically reducing the funds available for training and care. One result of decreased funding is increased collaboration between community psychiatric facilities (short-term inpatient, outpatient, and auxiliary services) and long-term inpatient state facilities. Another result is decreased availability of long-term care and reduced length of stay for acute patient care.

Professional changes

Mental health professionals have experienced enormous changes in perspective, focus, and direction, which are reflected in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (*DSM-IV-TR*). With this system of classifying mental disorders, clinicians must consider many aspects of a patient's behavior, mental performance, and history, emphasizing observable data rather than subjective and theoretical impressions.

DSM-IV-TR defines a mental disorder as a clinically significant behavioral or psychological syndrome or pattern that's associated with current distress (a painful symptom), disability (impairment in one or more important areas of functioning), or a significantly greater risk of suffering, death, pain, disability, or an important loss of freedom. This syndrome or pattern must not be merely an expected response such as grief over the death of a loved one. Whatever its original cause, it must currently be considered a sign of a behavioral, psychological, or biological dysfunction.

To add diagnostic detail, *DSM-IV-TR* uses a multiaxial approach. It specifies that every patient be evaluated on each of these five axes:

- *Axis I* — clinical disorder, the diagnosis (or diagnoses) that best describes the presenting complaint
- *Axis II* — personality disorders and mental retardation
- *Axis III* — general medical conditions, a description of any concurrent medical conditions or disorders
- *Axis IV* — psychosocial and environmental problems

- *Axis V* — global assessment of functioning (GAF), based on a scale of 1 to 100. The GAF scale allows evaluation of the patient's overall psychological, social, and occupational functioning.

The first three axes, which constitute the official diagnostic assessment, encompass the entire spectrum of mental and physical disorders. This system may require multiple diagnoses. For example, on axis I, a patient may have a psychoactive substance abuse disorder and a mood disorder. He may even have multiple diagnoses within the same class, as in major depression superimposed on cyclothymic disorder. A patient also may have a disorder on axes I, II, and III simultaneously.

Axis IV documents the effect of psychosocial and environmental stressors on the patient. Examples of such stressors include marital, familial, interpersonal, occupational, domestic, financial, legal, developmental, and medical concerns as well as environmental factors and natural disasters.

Axis V measures how well the patient has functioned over the past year and includes his current level of functioning.

A patient's diagnosis after being evaluated on these five axes may look like this:

- *Axis I* — adjustment disorder with anxious mood
- *Axis II* — obsessive-compulsive personality
- *Axis III* — Crohn's disease, acute bleeding episode

- *Axis IV* — recent remarriage, death of father
- *Axis V* — GAF = 65 (current).

Related professional forces

An increased emphasis on holistic care has brought a closer relationship between psychiatry and the rest of medicine. More hospitalized patients benefit from psychiatric consultations, reflecting a growing recognition of the emotional basis of physical disorders. Advances in neurobiology have increased our understanding of the physiologic basis of mental function. This has resulted in better diagnosis and treatment of mental disorders. Complementary and alternative therapies such as acupuncture, massage, and aromatherapy are also being integrated into treatment.

Psychosocial assessment

You'll encounter patients with mental and emotional problems in all clinical areas and settings. Begin your care of these patients with a psychosocial assessment.

For this assessment to be effective, you need to establish a therapeutic relationship with the patient that's based on trust. You must communicate to him that his thoughts and behaviors are important. Effective communication involves sending and receiving clear messages. (See *Communication barriers,* pages 1244 and 1245.) Words count, as does nonverbal communication — such as eye contact, posture, facial expressions, gestures, clothing, affect, and even silence. All can convey a powerful message.

Choose a quiet, private setting for the assessment interview. Interruptions and distractions threaten confidentiality and interfere with effective listening. If you're meeting the patient for the first time, introduce yourself and explain the interview's purpose. Sit at a comfortable distance from the patient, and give him your undivided attention.

During the interview, adopt a professional but friendly attitude, and maintain eye contact to the level that the patient can tolerate. A calm, nonthreatening tone of voice will encourage the patient to talk more

openly. Avoid value judgments. Don't rush through the interview; building a trusting therapeutic relationship takes time.

Patient history

A patient history establishes a baseline and gives clues to the underlying or precipitating causes of the current problem. The patient may not be a reliable source of information, particularly if he has a significant mental illness that affects his functioning. If possible, verify his responses with family members, friends, or health care personnel. Also check facility records from previous admissions, if possible, and compare his past behavior, symptoms, and circumstances with the current situation.

Explore the patient's chief complaint, current symptoms, psychiatric history, demographic data, socioeconomic data, cultural and religious beliefs, medication history,

and physical illnesses. Identify the patient's strengths as well as problems.

COMMUNICATION BARRIERS

Ineffective communication can prevent a successful interview.

Language difficulties or differences

If the patient speaks English, try to use language that's appropriate to his educational level and culture. Avoid medical terms that he may not understand.

If the patient speaks a foreign language or an unfamiliar dialect, try to have an interpreter on hand. The presence of a third person, though, may make the patient less willing to share his feelings.

Be aware of words that can have more than one meaning. For instance, the word *bad* also can be used as slang to mean “good.”

Inappropriate responses

Your responses to the patient can inadvertently suggest disinterest, anxiety, or annoyance, or they can imply value judgments. Examples include abruptly changing the subject or discounting the patient's feelings.

Hearing loss

If the patient can't hear you clearly, he may misinterpret your responses. If you're interviewing a patient with impaired hearing, check whether he's wearing a hearing aid. If so, is it turned on? If not, can he read lips? If possible, face him and speak clearly and slowly, using common words and keeping your questions short, simple, and direct.

If the patient is elderly, use a low tone of voice. With aging, the ability to hear high-pitched tones deteriorates first. If his hearing impairment is severe, he may have to communicate by writing, or you may need to collect information from his family or friends.

Thought disorders

If the patient's thought patterns are incoherent or irrelevant, he may be unable to interpret messages correctly, focus on the interview, or provide appropriate responses.

When assessing such a patient, ask simple questions about concrete topics and clarify his responses. Encourage him to express himself clearly.

Paranoid thinking

Deal with a paranoid patient in a nonthreatening way. Avoid touching him because he may misinterpret your touch as an attempt to harm him. Restrict hand motions and maintain physical distance. Accept the patient's statements of paranoid thoughts in a nonjudgmental manner.

Hallucinations

A hallucinating patient experiences imaginary sensory perceptions with no basis in reality. These distortions prevent him from hearing and responding appropriately.

Show concern if the patient is hallucinating, but don't reinforce his perceptions. Be as specific as possible when you give him commands. For instance, if he says he's hearing voices, tell him to stop listening to the voices and to listen to you instead.

Delusions

A deluded patient defends irrational beliefs or ideas despite factual evidence to the contrary. Some delusions may be so bizarre that you'll immediately recognize them; others may be difficult to identify.

Don't condemn or agree with a patient's delusional beliefs and don't dismiss a statement because you think it's delusional. Instead, gently emphasize reality without being argumentative.

Delirium

A delirious patient experiences disorientation, hallucinations, and confusion. Misinterpretation and inappropriate responses commonly result. Talk directly to such a patient and ask simple questions.

Offer frequent reassurance. Provide protection and appropriate physical care for the underlying cause of the delirium.

Dementia

The patient who suffers dementia — an irreversible deterioration of mental capacity — may experience changes in memory and thought patterns, and his language may become distorted or slurred.

When interviewing such a patient, use simple, concise language and minimize distractions. Don't make statements that he may easily misinterpret. Maintain calm and establish a routine.

- *Chief complaint*. The patient may not voice his chief complaint directly. Instead, you or others may note that he's having difficulty coping or is exhibiting unusual behavior. If this occurs, determine whether the patient is aware of the problem. When documenting the patient's response, write it verbatim and enclose it in quotation marks.
- *Current symptoms*. Find out about the onset of symptoms, their severity and persistence, and whether they occurred abruptly or insidiously. Compare the patient's condition with his normal level of functioning.
- *Psychiatric history*. Discuss past psychiatric disturbances, such as episodes of delusions, violence, depression, attempted suicides, drug or alcohol abuse, and previous psychiatric treatment.
- *Demographic data*. Determine the patient's age, sex, ethnic origin, primary language, birthplace, religion, and marital status. Use this information to establish a baseline and validate the patient's record.
- *Socioeconomic data*. Obtain information about the patient's educational level, housing conditions, income, current employment status, and family, because these data may provide clues to his current problem and may aid in the development of a treatment plan. Determine current stressors from a holistic perspective.
- *Cultural and religious beliefs*. A patient's background and values affect his response to illness and his adaptation to care. Certain questions and behaviors considered acceptable in one culture may be inappropriate in another. Determine the extent to which the patient may utilize cultural rituals, treatments, and healing practices.
- *Medication history*. Certain drugs can cause symptoms of mental illness. Review any medications the patient may be taking, including over-the-counter drugs and herbal supplements or remedies, and check for interactions. If he's taking an antipsychotic, antidepressant,

anxiolytic, or antimanic drug, ask if his symptoms have improved, if he's taking the medication as prescribed, and if he has had any adverse reactions.

- *Physical illnesses*. Find out if the patient has a history of medical disorders that may cause distorted thought processes, disorientation, depression, or other symptoms of mental illness. For instance, does he have a history of renal or hepatic failure, infection, thyroid disease, increased intracranial pressure, or a metabolic disorder? Additionally, has the patient suffered recent head trauma, infection, or physical illness?

Patient appearance, behavior, and mental status

Assess the patient's appearance, behavior, mood, thought processes, cognitive function, coping mechanisms, and potential for self-destructive behavior, and record your assessment.

- *General appearance*. The patient's appearance helps to indicate his emotional and mental status. Specifically, note his dress and grooming. Is his appearance clean and appropriate for his age, sex, and situation?

COPING MECHANISMS DEFINED

Coping, or defense, mechanisms help to relieve anxiety. Common ones include:

- *denial* — avoiding the awareness of truth or reality
- *displacement* — shifting of an emotion from its original object to a substitute
- *fantasy* — creation of unrealistic or improbable images to escape from daily pressures and responsibilities
- *identification* — unconscious adoption of the personality characteristics, attitudes, values, and behavior of another person

- *projection* — displacement of negative feelings onto another person
- *rationalization* — substitution of acceptable reasons for the real or actual reasons motivating behavior
- *reaction formation* — conduct in a manner opposite from the way the person feels
- *regression* — return to behavior of an earlier, less worrisome time in life
- *repression* — exclusion of unacceptable thoughts and feelings from the conscious mind, leaving them to operate in the subconscious.

Is the patient's posture erect or slouched? Is his head lowered? What about his gait? Is it brisk, slow, shuffling, or unsteady? Does he walk normally? Note his facial expression. Does he look alert or does he stare blankly? Does he appear sad or angry? Does the patient maintain direct eye contact? Does he stare at you for long periods?

- *Behavior.* Note the patient's demeanor and overall attitude as well as any extraordinary behavior such as speaking to a person who isn't present. Also record mannerisms. Does he bite his nails, fidget, or pace? Does he have any tics or tremors? How does he respond to the interviewer? Is he cooperative, friendly, hostile, or indifferent?

Behavior should be evaluated also in light of the patient's culture. For instance, making eye contact is considered respectful and attentive behavior in most Western cultures. However, eye contact may be considered rude and aggressive in several Asian and Native American cultures, and avoiding eye contact is considerate and respectful. Blacks may be more actively verbal within their culture group, where oral tradition and multiparty conversations are common. In a traditional medical setting, this patient may be restrained or silent.

- *Mood.* Does the patient appear excited or depressed? Is he sweating, breathing heavily, crying, or trembling? Does his mood change with little provocation? Ask him to describe his current feelings in concrete terms and to suggest possible reasons for these feelings. Note

inconsistencies between body language and mood (such as smiling when discussing an angerprovoking situation).

- *Thought processes and cognitive function.* Evaluate the patient's orientation to time, place, and person, noting any confusion or disorientation. Look for delusions, hallucinations, obsessions, compulsions, fantasies, and daydreams.

Assess the patient's attention span and ability to recall events in the distant and recent past. For example, to assess immediate recall, ask him to repeat a series of five or six names of objects. Test his intellectual functioning by asking him to add a series of numbers and his sensory perception and coordination by having him copy a simple drawing. Inappropriate responses to a hypothetical situation ("What would you do if you won the lottery?") can indicate impaired judgment. Keep in mind that the patient's cultural background and personal values will influence his answer.

Note speech characteristics that may indicate altered thought processes, including monosyllabic responses; irrelevant or illogical replies to questions; convoluted or excessively detailed speech; repetitious, accelerated, or slowed speech patterns; flight of ideas; and sudden silence with an obvious reason.

Finally, assess the patient's insight by asking if he understands the significance of his illness, the plan of treatment, and the effect it will have on his life.

- *Coping mechanisms.* The patient who's faced with a stressful situation will utilize coping, or defense, mechanisms—behaviors that operate on an unconscious level to protect the ego. Examples include denial, regression, displacement, projection, reaction formation, and fantasy. Look for an excessive reliance on these coping mechanisms. (See *Coping mechanisms defined.*)
- *Potential for self-destructive behavior.* Mentally healthy people may intentionally take death-defying risks such as participating in dangerous sports. The risks taken by self-destructive patients, however, aren't death-defying but rather death-seeking.

Not all self-destructive behavior is suicidal in intent. The patient may engage in self-destructive behavior because it helps him feel alive. A patient who has lost touch with reality may cut or mutilate body parts to focus on physical pain, which may be less overwhelming than emotional distress.

Assess patients for suicidal tendencies, particularly if they report signs and symptoms of depression. (See *Suicide's warning signs*.) Not all such patients want to die; however, the incidence of suicide is higher in depressed patients than in patients with other diagnoses.

Diagnostic tests

The laboratory tests, psychological tests, and EEG and brain imaging studies summarized here provide information about the patient's mental status and possible physical causes of his signs and symptoms.

Laboratory tests

Urinalysis, hemoglobin level, hematocrit, serum electrolyte and serum glucose levels, and liver, kidney, and thyroid function tests screen for physical disorders that can cause psychiatric signs and symptoms. Toxicology studies of blood and urine can detect the presence of many drugs, and current laboratory methods can quantify the blood levels of these drugs. Patients on psychoactive drugs may need routine toxicology screening to ensure that they aren't receiving a toxic dose. (See *Toxicology screening,* page 1248.)

SUICIDE'S WARNING SIGNS

- Withdrawal and social isolation
- Signs and symptoms of depression, which may include crying, fatigue, sadness, helplessness, poor concentration, reduced interest in sex and other activities, constipation, and weight loss. Note that a patient is more likely to attempt suicide if he gains more energy. This may occur in the early stages of treatment with antidepressants.
- Farewells to friends and family

- Putting affairs in order
- Giving away prized possessions
- Covert suicide messages and death wishes
- Obvious suicide messages ("I'd be better off dead.")

Psychological and mental status tests

These tests evaluate the patient's mood, personality, and mental status. Commonly used tests include:

- The Mini-Mental Status Examination measures orientation, registration, recall, calculation, language, and graphomotor function.
- The Cognitive Capacity Screening Examination measures orientation, memory, calculation, and language.
- The Cognitive Assessment Scale measures orientation, general knowledge, mental ability, and psychomotor function.
- The Global Deterioration Scale assesses and stages primary degenerative dementia, based on orientation, memory, and neurologic function.
- The Functional Dementia Scale measures orientation, affect, and the ability to perform activities of daily living.
- The Beck Depression Inventory helps diagnose depression, determine its severity,

and monitor the patient's response during treatment.

TOXICOLOGY SCREENING

Toxic levels of certain drugs can be detected in blood, urine, or both.

Blood

- Alcohol (ethyl, isopropyl, and methyl)
- Ethchlorvynol

Urine

- Chlorpromazine
- Cocaine
- Desmethyldoxepin (metabolite of doxepin)
- Heroin (metabolized to and detected as morphine)
- Imipramine
- Methadone
- Morphine
- Phencyclidine (PCP)

Blood and urine

- Acetaminophen
- Amitriptyline
- Amobarbital
- Butabarbital
- Butalbital (component in Fiorinal)
- Caffeine
- Carisoprodol
- Chlordiazepoxide
- Codeine
- Desipramine
- Desmethyldiazepam (metabolite of diazepam)
- Diazepam
- Diphenhydramine
- Doxepin
- Flurazepam
- Glutethimide
- Ibuprofen
- Meperidine
- Mephobarbital
- Meprobamate

- Methapyrilene
- Methaqualone
- Methyprylon
- Norpropoxyphene (metabolite of propoxyphene)
- Nortriptyline
- Oxazepam
- Pentazocine
- Pentobarbital
- Phenobarbital
- Propoxyphene
- Salicylates and their conjugates
- Secobarbital

- The Eating Attitudes Test detects patterns that suggest an eating disorder.
- The Minnesota Multiphasic Personality Inventory helps assess personality traits and ego function in adolescents and adults. Test results include information on coping strategies, defenses, strengths, gender identification, and self-esteem. The test pattern may strongly suggest a diagnostic category, point to a suicide risk, or indicate the potential for violence.

EEG and brain imaging studies

To screen for brain abnormalities, the physician may order tests that visualize electrical brain-wave pattern disturbances or anatomic alterations.

- An EEG graphically records the brain's electrical activity. Abnormal results may indicate organic disease, psychotropic drug use, or certain psychological disorders.
- A computed tomography (CT) *scan* combines radiologic and computer analysis of tissue density to produce images of intracranial structures not readily seen on standard X-rays. This test can help detect brain

contusions or calcifications, cerebral atrophy, hydrocephalus, inflammation, space-occupying lesions, and vascular abnormalities.

- A magnetic resonance imaging (MRI) scan is a noninvasive imaging technique. MRI localizes atomic nuclei that magnetically align and then fall out of alignment in response to a radio-frequency pulse. The MRI scanner records signals from nuclei as

they realign; it then translates the signals into detailed pictures of anatomic structures. Compared with conventional X-rays and CT scans, the MRI scan provides superior contrast of soft tissues and sharper differentiation of normal and abnormal tissues. It also provides images of multiple planes, including sagittal and coronal views, in regions where bones usually interface.

- A positron emission tomography (PET) scan provides colorimetric information about the brain's metabolic activity by detecting how quickly tissues consume radioactive isotopes. PET scanning is used mainly for diagnosing neuropsychiatric problems, such as Alzheimer's disease, and some mental illnesses.

DISORDERS OF INFANCY, CHILDHOOD, AND ADOLESCENCE

Mental retardation

The American Association on Mental Retardation (AAMR) defines mental retardation as “significantly subaverage general intellectual function existing concurrently with deficits in adaptive behavior manifesting itself during the developmental period (before age 18).” Retardation commonly is accompanied by other physical and emotional disorders that may constitute disabilities in themselves. Mental retardation places a significant burden on patients and their families, resulting in stress, frustration, and family problems.

Causes and incidence

A specific cause is identifiable in only about 25% of people who are mentally retarded, and, of these, only 10% have the potential for cure. (See *Causes of mental retardation*.) In the remaining 75%, predisposing factors, such as deficient prenatal or perinatal care, inadequate nutrition, poor social environment, and poor child-rearing practices, contribute significantly to mental retardation.

CAUSES OF MENTAL RETARDATION

- Chromosomal abnormalities (Down syndrome, Klinefelter's syndrome)
- Disorders resulting from unknown prenatal influences (hydrocephalus, hydraencephaly, microcephaly)
- Disorders of metabolism or nutrition (phenylketonuria, hypothyroidism, Hurler's syndrome, galactosemia, Tay-Sachs disease)
- Environmental influences (cultural-familial retardation, poor nutrition, lack of medical care)
- Gestational disorders (prematurity)
- Gross brain disorders that develop after birth (neurofibromatosis, intracranial neoplasm)
- Infection and intoxication (congenital rubella, syphilis, lead poisoning, meningitis, encephalitis, insecticides, drugs, maternal viral infection, toxins)
- Psychiatric disorders (autism)
- Trauma or physical conditions (mechanical injury, asphyxia, hyperpyrexia)

Prenatal screening for genetic defects (such as Tay-Sachs disease) and counseling for families at risk for specific defects have reduced the incidence of genetically transmitted mental retardation.

An estimated 1% to 3% of the population is mentally retarded, demonstrating an IQ below 70 and associated difficulty in carrying out tasks required for personal independence.

Signs and symptoms

The observable effects of mental retardation are deviations from normal adaptive behaviors, ranging from learning disabilities and uncontrollable behavior to severe

cognitive and motor skill impairment. The earlier a child's adaptive deficit is recognized and he's placed in a special learning program, the more likely he is to achieve age-appropriate adaptive behaviors. If the patient is older, review his adaptation to his environment.

The family of a patient who's mentally retarded may report many problems stemming from frustration, fear, and exhaustion. These problems, such as financial difficulties, abuse, and divorce, can compromise the child's care. Physical examination may reveal signs of abuse or neglect.

People who are mentally retarded may exhibit signs and symptoms of other disorders, such as cleft lip, congenital heart defects, and cerebral palsy as well as a lowered resistance to infection.

Diagnosis

CONFIRMING DIAGNOSIS

A score of less than 70 on a standardized IQ test confirms the diagnosis of mental retardation.

The IQ test primarily predicts school performance and must be supplemented by other diagnostic evaluations.

For example, the Adaptive Behavior Scale deals with behaviors important to activities of daily living. This test evaluates self-help skills (toileting and eating), physical and social development, language, socialization, and time and number concepts. It also examines inappropriate behaviors, such as violent or destructive acts, withdrawal, and self-abusive or sexually aberrant behavior.

Age-appropriate adaptive behaviors are assessed by using developmental screening tests such as the Denver Developmental Screening test. These

tests compare the subject's functional level with the normal level for the same chronologic age. The greater the discrepancy between chronologic and developmental age, the more severe the retardation. In most European and North American cultures, the Vineland Social Maturity Scale, a tool used to determine social competence, is recommended for use when appropriate.

In children, the functional level is based on sensorimotor skills, self-help skills, and socialization. In adolescents and adults, it's based on academic skills, reasoning and judgment skills, and social skills.

Treatment

Effective management requires an interdisciplinary team approach, which continues to assist the patient and his family on primary, secondary, and tertiary levels. A major goal is to develop the patient's strengths. Another important goal is the development of social adaptive skills.

Children who are mentally retarded require special education and training, ideally beginning in infancy. An individualized, effective education program can optimize the quality of life for even the profoundly retarded.

The prognosis for people who are mentally retarded is related more to timing and aggressive treatment, personal motivation, training opportunities, and associated conditions than to the degree of mental retardation itself. With good support systems, many people who are mentally retarded become productive members of society. Successful management leads to independent functioning and occupational skills for some and a sheltered environment for others.

Special considerations

- Support the parents of a child diagnosed with mental retardation. They may be overwhelmed by caretaking and financial concerns and may have difficulty accepting and bonding with their child.
- Remember that a child who's mentally retarded has all the ordinary needs of a healthy child plus those created by his disability. The child especially needs affection, acceptance, stimulation, and prudent,

consistent discipline; he's less able to cope if rejected, overprotected, or forced beyond his abilities.

- When caring for a hospitalized patient who's mentally retarded, promote continuity of care by acting as a liaison for parents and other health care professionals.
- During hospitalization, continue behavorial training programs already in place, but remember that illness may bring on some regression.
- For the parents of a child who's severely retarded, suggest ways to cope with the

guilt, frustration, and exhaustion that commonly accompany caring for such a child. The parents may need an extensive teaching and discharge planning program, including physical care procedures, stress reduction techniques, support services, and referral to developmental programs. Ask the social services department to look into community resources.

- Teach parents how to care for the special needs of a child who's mentally retarded. Suggest that they contact the AAMR.
- Teach adolescents who are retarded how to deal with physical changes and sexual maturation. Encourage them to participate in appropriate sex education classes. People who are mentally retarded may have difficulty expressing sexual concerns because of limited verbal skills.

Tic disorders

Including Tourette syndrome, chronic motor or vocal tic disorder, and transient tic disorder, tic disorders are similar pathophysiologically but differ in severity and prognosis. All tic disorders, commonly known simply as *tics,* are involuntary, spasmodic, recurrent, and purposeless motor movements or vocalizations. These disorders are classified as motor or vocal and as simple or complex. (See *Classifying tics.*) Tics usually begin before age 18. Transient tics are usually self-limiting, but Tourette syndrome follows a chronic course with remissions and exacerbations. Some people who have very mild tics don't seek treatment.

Causes and incidence

Although their exact cause is unknown, tic disorders occur more in certain families, suggesting a genetic cause. Tics commonly develop when a child experiences overwhelming anxiety, usually associated with normal maturation. Tics may be caused or worsened by the use of phenothiazines or central nervous system stimulants or by head trauma.

All tic disorders are three times more common in boys than in girls. About 2% of the population has Tourette syndrome.

CLASSIFYING TICS

According to the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, motor and vocal tics are classified as simple or complex; however, category boundaries remain unclear. Also, combinations of tics may occur simultaneously.

Motor tics

Simple motor tics include eye blinking, neck jerking, shoulder shrugging, head banging, head turning, tongue protrusion, lip or tongue biting, nail biting, hair pulling, and facial grimacing.

Some examples of complex motor tics are facial gestures, grooming behaviors, hitting or biting oneself, jumping, hopping, touching, squatting, deep knee bends, retracing steps, twirling when walking, stamping, smelling an object, and imitating the movements of someone who is being observed (echopraxia).

Vocal tics

Examples of simple vocal tics include coughing, throat clearing, grunting, sniffing, snorting, hissing, clicking, yelping, and barking.

Complex vocal tics may involve repeating words out of context; using socially unacceptable words, many of which are obscene (coprolalia); or repeating the last-

heard sound, word, or phrase of another person (echolalia).

Complications

- Physical injury
- Retinal detachment
- Orthopedic disorders
- Self-mutilation

Signs and symptoms

Assessment findings vary according to the type of tic disorder. Inspection, coupled with the patient's history, may reveal the specific motor or vocal patterns that characterize the tic as well as the frequency, complexity, and precipitating factors. The patient or his family may report that the tics occur sporadically many times per day. (See *Stress disorders with physical signs*.)

STRESS DISORDERS WITH PHYSICAL SIGNS

Besides tic disorders, stress-related disorders that produce physical signs in children include stuttering, functional enuresis, functional encopresis, sleepwalking, and sleep terrors.

Stuttering

Characterized by abnormal speech rhythms with repetitions and hesitations at the beginning of words, stuttering may involve movements of the respiratory muscles, shoulders, and face. It may be associated with mental dullness, poor social background, and a history of birth trauma. However, this disorder most commonly occurs in children of average or superior intelligence who fear they can't meet expectations. Related problems may

include low self-esteem, tension, anxiety, humiliation, and withdrawal from social situations.

About 80% of stutterers recover after age 16. Evaluation and treatment by a speech pathologist teaches stutterers to place equal weight on each syllable in a sentence, how to breathe properly, and how to control anxiety.

Functional enuresis

This disorder is characterized by intentional or involuntary voiding of urine, usually during the night (nocturnal enuresis). Considered normal in children until age 3 or 4, functional enuresis occurs in about 40% of children at this age. It persists in 10% to age 5, in 5% to age 10, and in 1% of boys to age 18. Enuresis is more common in boys than in girls.

Causes may be related to stress, such as the birth of a sibling, the move to a new home, divorce, separation, hospitalization, faulty toilet training (inconsistent, demanding, or punitive), and unrealistic responsibilities. Associated problems include low self-esteem, social withdrawal from peers because of ostracism and ridicule, and anger, rejection, and punishment by caregivers.

Advise parents that a matter-of-fact attitude helps the child learn bladder control without undue stress. If enuresis persists into late childhood, treatment with imipramine may help. Dry-bed therapy may include the use of an alarm (wet bell pad), social motivation, selfcorrection of accidents, and positive reinforcement.

Functional encopresis

Denoted by evacuation of feces into the child's clothes or inappropriate receptacles, functional encopresis is associated with low intelligence, cerebral dysfunction, or other developmental symptoms such as language lag. Some children also show inefficient and ineffective gastric

motility. Related problems may include repressed anger, withdrawal from peer relationships, and loss of self-esteem.

Treatment involves encouraging the child to come to his parents when he has an "accident." Advise parents to give the child clean clothes without criticism or punishment. Medical examination should rule out any physical disorder. Child, adult, and family therapy may help reduce anger and disappointment over the child's development and improve parenting techniques. Supportive psychotherapy and relaxation therapy techniques may be useful in reducing anxiety and improving self-esteem.

Sleepwalking and sleep terrors

In sleepwalking, the child calmly rises from bed in a state of altered consciousness and walks around with no subsequent recollection of any dreams. In sleep terrors, he awakes terrified, in a state of clouded consciousness, usually unable to recognize parents and familiar surroundings. Visual hallucinations are common.

Sleepwalking is usually a response to an emotional concern. Tell parents to

gently "talk" the child back to his bed. If he wakes, they should comfort and support him, not tease him.

Sleep terrors are a normal developmental event in 2- and 3-year-old children, usually occurring within 30 minutes to 31/2 hours of sleep onset. Tachycardia, tachypnea, diaphoresis, dilated pupils, and piloerection are associated with sleep terrors. The child may also fear being alone.

Tell parents to make sure that the child has access to them at night. Sleep terrors usually are self-limiting and subside within a few weeks.

Note whether certain situations worsen the tics. All tic disorders may be worsened by stress, and they usually diminish markedly during sleep. The patient also may report that they occur during activities that require concentration, such as reading or sewing.

Determine whether the patient can control the tics. Most patients can do so, with conscious effort, for short periods.

Psychosocial assessment may reveal underlying stressful factors, such as problems with social adjustment, lack of self-esteem, and depression.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing tic disorders,* page 1254.

Treatment

Behavior modification and operant conditioning can help treat certain tic disorders. Psychotherapy can help the patient uncover underlying conflicts and issues as well as deal with the problems caused by the tics. Tourette syndrome is best treated with medications and psychotherapy.

No medications are helpful in treating transient tics. Haloperidol is the drug of choice for treating Tourette syndrome. Pimozide (an oral dopamine-blocking drug) and clonidine are alternative choices. Tetrabenazine has been used but is associated with depression of movement. Anxiolytics may be useful in dealing with secondary anxiety, but they don't reduce the severity or frequency of the tics.

Special considerations

- Offer emotional support and help the patient prevent fatigue.
- Suggest that the patient with Tourette syndrome contact the Tourette Syndrome Association to obtain information and support.

- Help the patient identify and eliminate any avoidable stress and learn positive new ways to deal with anxiety.
- Encourage the patient to verbalize his feelings about his disorder. Help him to understand that the movements are involuntary; he shouldn't feel guilty or blame himself for them.

Autistic disorder

A severe, pervasive developmental disorder, autistic disorder is marked by unresponsiveness to social contact, gross deficits in intelligence and language development, ritualistic and compulsive behaviors, restricted capacity for developmentally appropriate activities and interests, and bizarre responses to the environment. Autistic disorder may be complicated by epileptic seizures, depression and, during periods of stress, catatonic phenomena. Autism usually becomes apparent before the child reaches age 36 months but, in some children, the actual onset is difficult to determine.

Occasionally, autistic disorder isn't recognized until the child enters school. (See *Other pervasive developmental disorders*.)

DIAGNOSING TIC DISORDERS

The diagnosis of a tic disorder is based on criteria from the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Tourette syndrome

- The patient has had multiple motor tics and one or more vocal tics at some time during the illness, although not necessarily concurrently.
- The tics occur many times per day (usually in bouts) nearly every day or intermittently for more than 1 year.
- The disturbance causes marked distress or significant impairment in social, occupational, or other important areas of functioning.
- Onset occurs before age 18.

- The disturbance isn't the direct physiologic effect of a substance or a general medical condition.

Chronic motor or vocal tic disorder

- The patient has had single or multiple motor or vocal tics, but not both, at some time during the illness.
- The tics occur many times per day nearly every day or intermittently for more than 1 year. During this time, the person never had a tic-free period exceeding 3 consecutive months.
- The disturbance causes marked distress or significant impairment in social, occupational, or other important areas of functioning.
- Onset occurs before age 18.
- The disturbance isn't the direct physiologic effect of a substance or a general medical condition.
- Criteria have never been met for Tourette syndrome.

Transient tic disorder

- The patient has single or multiple motor or vocal tics, or both.
- The tics occur many times per day nearly every day for at least 4 weeks, but for no longer than 12 consecutive months.
- The disturbance causes marked distress or significant impairment in social, occupational, or other important areas of functioning.
- Onset occurs before age 18.
- The disturbance isn't the direct physiologic effect of a substance or a general medical condition.
- Criteria have never been met for Tourette syndrome or chronic motor or vocal tic disorder.

The prognosis for autistic disorder is poor; most patients require a structured environment throughout life.

Causes and incidence

The causes of autistic disorder remain unclear but are thought to include psychological, physiologic, and sociological factors. Much evidence has accumulated to suggest a biological substrate. The parents of a child who's autistic may appear distant and unaffectionate. However, because children who are autistic are unresponsive or respond with rigid, screaming resistance to touch and attention, parental remoteness may be merely a frustrated, helpless reaction to this disorder, not its cause.

Some children who are autistic show abnormal but nonspecific EEG findings that suggest brain dysfunction, possibly resulting from trauma, disease, or a structural abnormality. Autistic disorder has also been associated with maternal rubella, untreated phenylketonuria, tuberous sclerosis, anoxia during birth, encephalitis, infantile spasms, and fragile X syndrome. Studies have established a link with abnormalities in neurotransmitters, including (in some cases) increased dopamine and increased serotonin. There appears to be a genetic component as well; between 2% and 4% of siblings of those with autism also had autistic disorders at a rate higher than the general population.

Autistic disorder is rare, affecting 4 to 5 children per 10,000 births. It affects three to four times more boys than girls.

Signs and symptoms

A primary characteristic of infantile autistic disorder is unresponsiveness to people. Infants with this disorder won't cuddle, avoid eye contact and facial expressions, and are indifferent to affection and physical contact. Parents may report that the child becomes rigid or flaccid when held, cries when touched, and shows little or no interest in human contact.

As the infant grows older, his smiling response is delayed or absent. He doesn't lift his arms in anticipation of being picked up or form an attachment to a specific caregiver. Furthermore, he doesn't show the anxiety about strangers that's typical in the 8-month-old infant.

A child who's autistic fails to learn the usual socialization games (peek-a-boo, pat-a-cake, or bye-bye). He's likely to relate to others only to fill a physical need and then without eye contact or speech. The end result may be mutual withdrawal between parents and child.

Severe language impairment and lack of imaginative play are characteristic. The child may be mute or may use immature speech patterns. For example, he may use a single word to express a series of activities; he may say “ground” when referring to any step in using a playground slide.

His speech commonly shows echolalia (meaningless repetition of words or phrases addressed to him) and pronoun reversal (“you go walk” when he means, “I want to go for a walk”). When answering a question, he may simply repeat the question to mean yes and remain silent to mean no.

He shows little imagination, seldom acting out adult roles or engaging in fantasy play. In fact, he may insist on lining up an exact number of toys in the same manner over and over or repetitively mimic the actions of someone else.

A child who's autistic shows characteristically bizarre behavior patterns, such as screaming fits, rituals, rhythmic rocking, arm flapping, crying without tears, and disturbed sleeping and eating patterns. His behavior may be self-destructive (hand biting, eye gouging, hair pulling, or head banging) or self-stimulating (playing with his own saliva, feces, and urine). His bizarre responses to his environment include an extreme compulsion for sameness.

OTHER PERVASIVE DEVELOPMENTAL DISORDERS

Although autistic disorder is the most severe and most typical of the pervasive developmental disorders, recent evidence points to other similar disorders in this class.

For example, the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision category *pervasive developmental disorder not otherwise specified* refers to those patients who don't meet the criteria for autistic disorder but who *do* exhibit impaired

development of reciprocal social interaction and of verbal and nonverbal communication skills.

Some patients with this diagnosis exhibit a markedly restricted repertoire of activities and interests, but others don't. Research suggests that these disorders are more common than autistic disorder, occurring in 6 to 10 of every 10,000 children.

In response to sensory stimuli, he may underreact or overreact and he may ignore objects — dropping those he's given or not looking at them — or he may become excessively absorbed in them — continually watching the objects or the movement of his own fingers over the objects. He commonly responds to stimuli by head banging, rocking, whirling, and hand flapping. He tends to avoid using sight and hearing to interact with the environment.

A child who's autistic may exhibit additional behavioral abnormalities, such as:

DIAGNOSING AUTISTIC DISORDER

Autism is diagnosed when the patient meets the criteria in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision. At least six characteristics from the following three categories must be present, including at least two from the social interaction category and one each from the communication and patterns categories.

Social interaction

Impairment in social interaction, as shown by at least two of the following:

- marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction

- failure to develop peer relationships appropriate to developmental level
- no spontaneous sharing of enjoyment, interests, or achievements with others
- lack of social or emotional reciprocity
- gross impairment in ability to make peer friendships.

Communication

Impairment in communication, as shown by at least one of the following:

- delay in, or total lack of, spoken language development
- in individuals with adequate speech, marked impairment in initiating or sustaining a conversation with others
- stereotyped and repetitive use of language or idiosyncratic language
- lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.

Patterns

Restricted, repetitive, and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:

- encompassing preoccupation with one or more stereotyped and restricted patterns of interest that's abnormal either in intensity or focus
- apparently inflexible adherence to specific nonfunctional routines or rituals
- stereotyped and repetitive motor mannerisms
- persistent preoccupation with parts of objects.

Additional criteria

Delays or abnormal functioning in at least one of the following before age 3:

- social interaction
- language as used in social communication
- symbolic or imaginative play.

The disturbance isn't better accounted for by Rett's disorder or childhood disintegrative disorder.

- cognitive impairment (most have an IQ of 35 to 49)
- eating, drinking, and sleeping problems, for example, limiting his diet to just a few foods, excessive drinking, or repeatedly waking during the night and rocking
- mood disorders, including labile mood, giggling or crying without reason, lack of emotional responses, no fear of real danger but excessive fear of harmless objects, and generalized anxiety.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing autistic disorder.*

Treatment

The difficult and prolonged treatment of autistic disorder must begin early, continue for years (through adolescence), and coordinate efforts to encourage social adjustment

and speech development and to reduce self-destructive behavior.

Behavioral techniques are used to decrease symptoms and increase the child's ability to respond. Positive reinforcement, using food and other rewards, can enhance language and social skills. Providing pleasurable sensory and motor stimulation (such as jogging or playing with a ball) encourages appropriate behavior and helps eliminate inappropriate behavior. Drug therapy with an agent, such as haloperidol, may be

helpful. Risperidone has been used successfully to diminish aggressiveness and hyperactivity.

Treatment may take place in a psychiatric institution, in a specialized school, or in a day-care program; however, the current trend is toward home treatment. Family members may benefit from counseling, respite services, and interdisciplinary team coordination of care. Until the causes of infantile autism are known, prevention isn't possible.

Special considerations

- Reduce self-destructive behaviors. Physically stop the child from harming himself, while firmly saying “no.” When he responds to your voice, first give a primary reward (such as food); later, substitute verbal or physical reinforcement (such as saying “good” or giving the child a hug or a pat on the back). Work to identify positive ways for the child to channel his energy.
- Foster appropriate use of language. Provide positive reinforcement when the child indicates his needs correctly. Give verbal reinforcement at first (for example, by saying “good” or “great”); later, give physical reinforcement (such as a hug or a pat on the hand or shoulder).
- Encourage development of self-esteem. Show the child that he's acceptable as a person.
- Encourage self-care. For example, place a brush in the child's hand and guide his hand to brush his hair. Similarly, teach him to wash his hands and face.
- Encourage acceptance of minor environmental changes. Prepare the child for the change by telling him about it beforehand. Make initial changes minor; for example, change the color of his bedspread or the placement of food on his plate. When he has accepted minor changes, move on to bigger ones.
- Provide emotional support to the parents, and refer them to the Autism Society of America.
- Teach the parents how to physically care for the child's needs.

- Teach the parents how to identify signs of excessive stress and the coping skills to use under these circumstances. Emphasize that they'll be ineffective caregivers if they don't take the time to meet their own needs in addition to those of their child.
- Help the parents understand that they aren't responsible for their child's condition and shouldn't feel guilty about it.

Attention deficit hyperactivity disorder

The patient with attention deficit hyperactivity disorder (ADHD) has difficulty focusing his attention; engaging in quiet, passive activities; or both. Although the disorder is present at birth, diagnosis before age 4 or 5 is difficult unless the child shows severe symptoms. In some cases, however, the patient isn't diagnosed until adulthood.

Causes and incidence

ADHD is thought to be a physiologic brain disorder with a familial tendency. Some studies indicate that it may result from disturbances in neurotransmitter levels in the brain caused by reduced blood flow in the striated area of the brain. It affects 3% to 5% of school-age children and is three times more common in boys than in girls.

Complications

- Emotional and social complications
- Poor nutrition

Signs and symptoms

The principal sign of ADHD is hyperactivity that's present over a long period, in at least two settings (such as school and home), and is accompanied by easy distractibility. The patient may be impulsive, emotionally labile, explosive, or irritable. Although he may be highly intelligent, his

school or work performance patterns are sporadic. He may jump from

one partly completed project, thought, or task to another. The patient may have an attention deficit without hyperactivity; if so, he's less likely to be diagnosed and treated.

DIAGNOSING ATTENTION DEFICIT HYPERACTIVITY DISORDER

The *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, groups certain signs and symptoms into inattention and hyperactivity-impulsivity categories. The diagnosis of attention deficit hyperactivity disorder is based on the person demonstrating at least six signs or symptoms from the inattention group or at least six from the hyperactivity-impulsivity group. They must have persisted for at least 6 months to a degree that's maladaptive and inconsistent with the person's developmental level.

Symptoms of inattention

The person manifesting *inattention:*

- often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
- often has difficulty sustaining attention in tasks or play activities
- often doesn't seem to listen when spoken to directly
- often doesn't follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not because of oppositional behavior or failure to understand instructions)
- often has difficulty organizing tasks and activities
- often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)

- often loses things needed for tasks or activities (for example, toys, school assignments, pencils, books, or tools)
- often becomes distracted by extraneous stimuli
- often demonstrates forgetfulness in daily activities.

Symptoms of hyperactivity-impulsivity

The person manifesting *hyperactivity:*

- often fidgets with hands or feet or squirms in seat
- often leaves his seat in the classroom or in other situations in which remaining seated is expected
- often runs about or climbs excessively in situations in which remaining seated is expected
- often has difficulty playing or engaging in leisure activities quietly
- often is characterized as "on the go" or acts as if "driven by a motor"
- often talks excessively.

Symptoms of impulsivity

The person manifesting *impulsivity:*

- often blurts out answers before questions have been completed
- often has difficulty awaiting his turn
- often interrupts or intrudes on others.

Additional features

- Some symptoms that caused impairment were evident before age 7.
- Some impairment from the symptoms is present in two or more settings.
- Clinically significant impairment in social, academic, or occupational functioning must be clearly evident.

- The symptoms don't occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or another psychotic disorder and aren't better accounted for by another mental disorder.

In a younger child, signs and symptoms include an inability to wait in line, remain seated, wait his turn, or concentrate on one activity until its completion. An older child or an adult may be described as impulsive and easily distracted by irrelevant thoughts, sounds, or sights. He may also be

characterized as emotionally labile, inattentive, or prone to daydreaming. His disorganization becomes apparent as he has difficulty meeting deadlines and keeping track of school or work tools and materials.

Diagnosis

The child is usually referred for evaluation by the school. (See *Diagnosing attention deficit hyperactivity disorder*.) Diagnosis of ADHD usually begins by obtaining data from several sources, including the parents, teachers, and the child himself. Complete psychological, medical, and neurologic evaluations rule out other problems. Then the child undergoes tests that measure impulsiveness, attention, and the ability to sustain a task. The combined findings portray a clear picture of the disorder and of the areas of support the child will need.

Treatment

Education is the first step in effective treatment. The entire treatment team (which ideally includes parents, teachers, and therapists as well as the patient and the physician) must understand the disorder and its effect on the individual's functioning.

Treatment varies, depending on the severity of symptoms and their effects on the child's ability to function. Behavior modification, coaching, external structure, use of planning and organizing systems, and supportive psychotherapy help the patient cope with the disorder.

The patient may benefit from medication to relieve symptoms. Ideally, the treatment team identifies the symptoms to be managed, selects appropriate medication, and then tracks the patient's symptoms carefully to determine the drug's effectiveness. Stimulants are the most commonly used drugs. Antipsychotics may sometimes be used in combination with stimulants. However, other drugs, including tricyclic antidepressants, mood stabilizers, and beta-adrenergic blockers, sometimes help control symptoms.

Special considerations

- Work with the patient and his parents to develop external structure and controls.
- Set realistic expectations and limits because the patient with ADHD is easily frustrated (which leads to decreased selfcontrol).
- Remain calm and consistent.
- Keep instructions short and simple.
- Provide praise, rewards, and positive feedback whenever possible.

Conduct disorder

Aggressive behavior is the hallmark of conduct disorder. A child with this disorder fights, bullies, intimidates, and assaults others physically or sexually, and is truant from school at an early age. Typically, the patient has poor relationships with peers and adults and violates others' rights and society's rules. Conduct disorder evolves slowly over time until a consistent pattern of behavior is established.

Causes and incidence

Studies have suggested that the disorder has biological (including genetic) and psychosocial components. Roughly 30% to 50% of clinical populations with conduct disorder also have attention deficit hyperactivity disorder (ADHD). Social risk factors that may predispose a child to conduct disorder include socioeconomic deprivation; harsh, punitive parenting with verbal or physical aggression; separation from parents; early institutionalization; family neglect, abuse, or violence;

frequent verbal abuse from parents, teachers, or other authority figures; parental psychiatric illness, substance abuse, or marital discord; large family size, crowding, and poverty; and divorce with persistent hostility between the parents. Other risk factors include child abuse and neglect, neurologic damage caused by low birth weight or birth complications, underarousal of the autonomic nervous system, learning impairments, insensitivity to physical pain and punishment, and impaired functioning of the nonadrenergic system.

The prevalence of conduct disorder among people ages 9 to 17 is about 1% to 4%. An estimated 6% to 16% of boys and 2% to 9% of girls younger than age 18 have the disorder. The prognosis is worse in children with an earlier onset; these children are more likely to develop antisocial personality disorder as adults.

DIAGNOSING CONDUCT DISORDER

A patient with conduct disorder must meet at least three of the criteria from any of the categories below; these criteria must have been noted within the year before the time of examination, and at least one criterion must have been present within the past 6 months.

Aggression to people and animals

- Bullies, threatens, or intimidates others
- Commonly starts physical fights
- Has used a weapon that can cause serious physical harm to others
- Has been physically cruel to people
- Has stolen while confronting a victim
- Has forced someone into sexual activity

Destruction of property

- Deliberately setting fire with the intention of causing serious damage
- Deliberately destroying others' property

Deceitfulness

- Has broken into someone else's house, car, or building
- Commonly lies to obtain goods or favors or to avoid obligations
- Has stolen items of nontrivial value without confronting a victim

Serious violations of rules

- Often stays out at night despite parental prohibitions, starting before age 13
- Has run away from home overnight at least twice while living in the parents' or surrogate parents' home
- Commonly skips school, beginning before age 13

Additional criteria

- The behavior disturbance must cause clinically significant impairment in social, academic, or occupational functioning.
- The patient is age 18 or older and doesn't meet the criteria for antisocial personality disorder.

Other features

- Conduct disorder is considered mild if the person exhibits few if any conduct problems beyond those required to make the diagnosis and if the conduct problems cause only minor harm to others.
- The disorder is considered moderate if the conduct problems and their effects on others are intermediate between mild and severe.
- The condition is considered severe if the person has many conduct problems beyond those needed to make the diagnosis, or if the conduct problems cause considerable harm to others.

Complications

- Poor performance in school
- Substance abuse
- Higher incidence of other psychosocial disorders such as ADHD, oppositionaldefiance disorder, mood disorders, anxiety disorders, depression, learning disabilities

Signs and symptoms

- Sexual abuse of others
- Cheating in school
- Cruelty to animals
- Engaging in precocious sexual activity
- Fighting with family members and peers
- Skipping classes

- Smoking cigarettes
- Speaking to others in a hostile manner
- Stealing or shoplifting
- Using drugs or alcohol
- Vandalizing or destroying property

Diagnosis

Medical and psychiatric evaluations, feedback from parents, a school consultant's recommendations, case manager plan, and probation officer reports can assist in a team approach to diagnosis. The diagnosis is made when the patient meets the criteria in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision. (See *Diagnosing conduct disorder*.)

Treatment

Treatment focuses on coordinating the child's psychological, physiologic, and educational needs. A structured living environment with consistent rules and consequences can help reduce many symptoms. Parents need to be taught how to deal with the child's demands. Juvenile justice interventions may also be used. Medication can be useful as an adjunct to treatment. Overt aggression responds to many medications, such as antipsychotics, lithium, clonidine, and selective serotonin reuptake inhibitors. ADHD, if present, must also be addressed.

Special considerations

- Work to establish a trusting relationship with the child.
- Provide clear behavioral guidelines, including consequences for disruptive and manipulative behavior.
- Teach the child effective coping skills, social skills, and problem-solving skills, and have him demonstrate them in return.
- Teach the child to express anger appropriately through constructive methods to release negative feelings and frustrations.
- Help the child accept responsibility for behavior rather than blaming others, becoming defensive, and wanting revenge.
- Use role-playing to help the child practice handling stress and gain skill and confidence in managing difficult situations.
- Support the parents in setting firm, appropriate limits for the child.

SUBSTANCE-RELATED DISORDERS

Alcohol-related disorder

The patient with alcohol-related disorder experiences a need for the daily intake of large amounts of alcohol for day-to-day functioning. A regular pattern of heavy drinking limited to weekends, with periods of sobriety between weekends, also suggests a pattern of abuse. People with these patterns of drinking usually show impaired social and occupational functioning.

Causes and incidence

Numerous biological, psychological, and sociocultural factors appear to be involved in alcohol addiction. An offspring of one parent with alcohol-related disorder is seven to eight times more likely to become an alcoholic than is a peer without such a parent. Biological factors may include genetic or biochemical abnormalities, nutritional deficiencies, endocrine imbalances, and allergic responses.

Psychological factors may include the urge to drink alcohol to reduce anxiety or symptoms of mental illness; the desire to avoid responsibility in familial, social, and work relationships; and the need to bolster self-esteem.

Sociocultural factors include the availability of alcoholic beverages, group or peer pressure, an excessively stressful life-style, and social attitudes that approve of frequent drinking.

More than 15% of American adults have a problem with alcohol use, and about 5% to 10% of male and 3% to 5% of female drinkers are alcohol dependent, accounting for about 12.5 million people. Alcohol-related disorder cuts across all social and economic groups, involves both sexes, and occurs at all stages of the life cycle, beginning as early as elementary school.

Complications

Chronic alcohol abuse brings on many physical complications, including malnutrition, cirrhosis of the liver, peripheral neuropathy, brain damage, and cardiomy-opathy.

Assess for these complications in a patient with alcohol-related disorder. (See *Complications of alcohol use*.)

COMPLICATIONS OF ALCOHOL USE

Alcohol can damage body tissues by its direct irritating effects, by changes that take place in the body during its metabolism, by aggravation of existing disease, by accidents occurring during intoxication, and by

interactions between the substance and drugs. Such tissue damage can cause these complications.

Cardiopulmonary complications

- Cardiac arrhythmias
- Cardiomyopathy
- Chronic obstructive pulmonary disease
- Essential hypertension
- Increased risk of tuberculosis
- Pneumonia

GI complications

- Chronic diarrhea
- Esophageal cancer
- Esophageal varices
- Esophagitis
- Gastric ulcers
- Gastritis
- GI bleeding
- Malabsorption
- Pancreatitis

Hematologic complications

- Anemia
- Leukopenia
- Reduced number of phagocytes

Hepatic complications

- Alcoholic hepatitis
- Cirrhosis
- Fatty liver

Neurologic complications

- Alcoholic dementia
- Alcoholic hallucinosis
- Alcohol withdrawal delirium
- Korsakoff's syndrome
- Peripheral neuropathy
- Seizure disorders
- Subdural hematoma
- Wernicke's encephalopathy

Psychiatric complications

- Amotivational syndrome
- Depression
- Fetal alcohol syndrome
- Impaired social and occupational functioning
- Multiple substance abuse
- Suicide

Other complications

- Beriberi
- Hypoglycemia
- Infertility
- Leg and foot ulcers
- Impaired respiratory diffusion
- Increased incidence of pulmonary infections
- Myopathies
- Prostatitis
- Sexual performance difficulties

Signs and symptoms

Because the person with alcohol dependence may hide or deny his addiction, and may temporarily manage to maintain a functional life,

assessing for alcohol-related disorder can be difficult. Note physical and psychosocial symptoms that suggest alcohol-related disorder. For example, the patient's history may suggest a need for daily or episodic alcohol use to maintain adequate functioning, an inability to discontinue or reduce alcohol intake, episodes of anesthesia or amnesia (blackouts) during intoxication, episodes of violence during intoxication, and interference with social and familial relationships and occupational responsibilities. Many minor complaints may be alcohol-related. The patient may report malaise, dyspepsia, mood swings or depression, and an increased incidence of infection. Observe the patient for poor personal hygiene and untreated

injuries, such as cigarette burns, fractures, and bruises, that he can't fully explain. Note any evidence of an unusually high tolerance of sedatives and opioids.

Although each person abusing alcohol may present in his own unique way, secretive or manipulative behavior may be a manifestation of the patient's denial of the severity of his addiction. Suspect alcohol-related disorder if the patient uses inordinate amounts of aftershave or mouthwash. When confronted, the patient may deny or rationalize the problem. Or, he may be guarded or hostile in his response and may even sign out of the hospital against medical advice. He also may project his anger or feelings of guilt or inadequacy onto others to avoid confronting his illness.

After abstinence or reduction of alcohol intake, signs and symptoms of withdrawal —which begin shortly after drinking has stopped and last for 5 to 7 days— may vary. The patient initially experiences anorexia, nausea, anxiety, fever, insomnia, diaphoresis, and tremor, progressing to severe tremulousness, agitation and, possibly, hallucinations and violent behavior. Major motor seizures (alcohol withdrawal seizures) can occur during withdrawal. Suspect alcohol-related disorder in any patient with unexplained seizures. (See *Signs and symptoms of alcohol withdrawal*, page 1264.)

ELDER TIP

Remember to consider the possibility of alcohol abuse when evaluating older patients. Research suggests that alcoholism affects 2% to 10% of adults older than age 60. More than half of all elderly hospital admissions are due to alcohol-related problems.

Diagnosis

For characteristic findings in patients with alcoholism, see *Diagnosing substance dependence and related disorders,* page 1265.

Clinical findings may help support the diagnosis of alcohol-related disorder. For example, laboratory tests can confirm alcohol use and complications and document recent alcohol ingestion. A blood alcohol level ranging from 0.08% to 0.10% weight/volume (200 mg/dl) is accepted as the level of intoxication, depending on the state or country. The blood alcohol level in a physically dependent and tolerant drinker may exceed levels that would cause severe dysfunction or death in a nontolerant drinker. For example, a tolerant drinker might have a blood alcohol level of more than 0.5 mg (the usual lethal level) and still be alive, talking, and moving.

In severe hepatic disease, the blood urea nitrogen level is increased, and the serum glucose level is decreased. Further testing may reveal increased serum ammonia and amylase levels. Urine toxicology studies may help determine if the patient with alcohol withdrawal delirium or another acute complication abuses other drugs as well.

Liver function studies revealing increased levels of serum cholesterol, lactate dehydrogenase, alanine aminotransferase, aspartate aminotransferase, and creatine phosphokinase may point to liver damage, and elevated serum amylase and lipase levels point to acute pancreatitis. A hematologic workup can identify anemia, thrombocytopenia, increased prothrombin time, and increased partial thromboplastin time.

Treatment

Total abstinence from alcohol is the only effective treatment. Supportive programs that offer detoxification, rehabilitation, and

aftercare, including continued involvement in Alcoholics Anonymous (AA), may produce good long-term results.

Acute intoxication is treated symptomatically by supporting respiration, preventing aspiration of vomitus, replacing fluids, administering I.V. glucose to prevent hypoglycemia, correcting hypothermia or acidosis, and initiating emergency treatment for trauma, infection, or GI bleeding.

Treatment of chronic alcohol abuse requires a varied approach that may include medications to deter alcohol use and treat effects of withdrawal; psychotherapy, consisting of behavior modification techniques, group therapy, and family therapy; and appropriate measures to relieve associated physical problems.

Aversion, or deterrent, therapy involves a daily oral dose of disulfiram (Antabuse) to prevent compulsive drinking. This drug interferes with alcohol metabolism and allows toxic levels of acetaldehyde to accumulate

in the patient's blood, producing immediate and potentially fatal distress in the event he consumes alcohol up to 2 weeks after taking it. Disulfiram is contraindicated during pregnancy and in the patient with diabetes, heart disease, severe hepatic disease, or any disorder in which such a reaction could be especially dangerous. Another form of aversion therapy attempts to induce aversion by administering alcohol with an emetic.

SIGNS AND SYMPTOMS OF ALCOHOL WITHDRAWAL

Alcohol withdrawal signs and symptoms may vary in degree from mild (morning hangover) to severe (alcohol withdrawal delirium). Formerly known as *delirium tremens,* alcohol withdrawal delirium is marked by acute distress following abrupt withdrawal after prolonged or massive use.

Signs and symptoms	Mild	Moderate	Severe

Anxiety	Mild restlessness	Obvious motor restlessness and anxiety	Extreme restlessness and agitation with intense fearfulness
Appetite	Impaired appetite	Marked anorexia	Rejection of all food and fluid except alcohol
Blood pressure	Normal or slightly elevated systolic	Usually elevated systolic	Elevated systolic and diastolic
Confusion	None	Variable	Marked confusion and disorientation
GI symptoms	Nausea	Nausea and vomiting	Dry heaves and vomiting
Hallucinations	None	Vague, transient visual and auditory hallucinations and illusions (commonly nocturnal)	Visual and occasionally auditory hallucinations, usually of fearful or threatening content; misidentification of people and frightening delusions related to hallucinatory experiences
Seizures	None	Possible	Common
Sleep disturbance	Restless sleep or insomnia	Marked insomnia and nightmares	Total wakefulness
Sweating	Slight	Obvious	Marked hyperhidrosis

The first drug approved by the U.S. Food and Drug Administration for the treatment of alcohol-related disorder since disulfiram is naltrexone (Revia), an opiate antagonist that effectively reduces the amount of intake, severity of craving, and relapse incidence. It's believed to work by preventing the effects of increased endorphins produced as a product of increased alcohol intake.

DIAGNOSING SUBSTANCE DEPENDENCE AND RELATED DISORDERS

The *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, identifies these diagnostic criteria for substance dependence, abuse, intoxication, and withdrawal.

Substance dependence

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by three or more of the following, occurring at any time in the same 12-month period:

- Tolerance, as defined by either of the following: the need for increased amounts of the substance to achieve intoxication or desired effect or a markedly diminished effect with continued use of the same amount of the substance.
- Withdrawal, as manifested by either of the following: the characteristic withdrawal syndrome for the substance or the same, or similar, substance is taken to relieve or avoid withdrawal symptoms.
- The person commonly takes the substance in larger amounts or over a longer period than was intended.
- The person experiences a persistent desire or unsuccessful efforts to cut down or control substance use.
- The person spends a lot of time in activities needed to obtain the substance, use the substance, or recover from its effects.
- The person abandons or reduces important social, occupational, or recreational activities because of

substance use.

- The person continues using the substance despite knowledge of having a persistent or recurrent physical or psychological problem that's likely to have been caused or worsened by the substance.

Substance abuse

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one or more of the following, occurring within a 12-month period:

- recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home
- recurrent substance use in situations in which using the substance is physically hazardous
- recurrent substance-related legal problems
- continued substance use despite having persistent or recurrent social or interpersonal problems caused or worsened by the effects of the substance.

The symptoms have never met the criteria for substance dependence for this class of substance.

Substance intoxication

- The development of a reversible substance-specific syndrome resulting from recent ingestion of, or exposure to, a substance.
- Clinically significant maladaptive behavioral or psychological changes, resulting from the effect of the substance on the central nervous system and developing during or shortly after use of the substance.
- Symptoms aren't caused by a general medical condition, and aren't better accounted for by another mental disorder.

Substance withdrawal

- Development of a substance-specific syndrome resulting from the cessation or reduction of substance use that has been heavy and prolonged.
- The substance-specific syndrome causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The symptoms aren't caused by a general medical condition and aren't better accounted for by another mental disorder.

For long-term success, the recovering individual must learn to fill the place alcohol once occupied in his life with something constructive. Therapy using disulfiram or naltrexone may only substitute one drug dependence for another, so it should be used prudently.

Benzodiazepine isn't recommended during rehabilitation due to its addictive nature and the potential for reinforcing the substance abuse behavior.

ELDER TIP

Because the older patient may be more sensitive to these drugs, withdrawal may take longer (weeks or months) and be more severe than in a younger adult.

Supportive counseling or individual, group, or family psychotherapy may help. Ongoing support groups are helpful. In AA, a self-help group with more than 1 million members worldwide, the alcoholic finds emotional support from others with similar problems. About 40% of AA's members stay sober as long as 5 years, and 30% stay sober longer than 5 years.

Special considerations

- During acute intoxication or withdrawal, carefully monitor the patient's mental status, heart rate, breath sounds, blood pressure, and

temperature every 30 minutes to 6 hours.

- Assess the patient for signs of inadequate nutrition and dehydration. Start seizure precautions and administer drugs prescribed to treat the signs and symptoms of withdrawal in chronic alcohol abuse.
- During withdrawal, orient the patient to reality because he may have hallucinations and may try to harm himself or others. Maintain a calm environment, minimizing noise and shadows to reduce the incidence of delusions and hallucinations. Avoid restraining the patient unless necessary to protect him or others.
- Approach the patient in a nonthreatening way. Limit sustained eye contact. Even if he's verbally abusive, listen attentively and respond with empathy. Explain all procedures.
- Monitor the patient for signs of depression or impending suicide.
- In chronic alcohol-related disorder, help the patient accept his drinking problem and the necessity for abstinence. Confront him about his behavior, urging him to examine his actions more realistically.
- If the patient is taking disulfiram (or has taken it within the past 2 weeks), warn him of the effects of alcohol ingestion, which may last from 30 minutes to 3 hours or longer. The reaction includes nausea, vomiting, facial flushing, headache, shortness of breath, red eyes, blurred vision, sweating, tachycardia, hypotension, and fainting. Emphasize that even a small amount of alcohol will induce this adverse reaction and that the longer he takes the drug, the greater his sensitivity to alcohol will be. Even medicinal sources of alcohol, such as mouthwash, cough syrups, liquid vitamins, and cold remedies, must be avoided.
- Refer the patient to AA and offer to arrange a visit from an AA member. Stress the effectiveness of this organization.
- For the individual who has lost all contact with his family and friends and who has a long history of unemployment, trouble with the law, or other problems associated with alcohol abuse, rehabilitation may involve job training, sheltered workshops, halfway houses, and other supervised facilities.
- Refer the spouse of an alcoholic to Al-Anon and children of an alcoholic to Alateen. By participating in these self-help groups, family

members learn to relinquish responsibility for the individual's drinking. Point out that family involvement in rehabilitation can reduce family tensions.

- Refer adult children of an alcoholic to the National Association for Children of Alcoholics.

Substance abuse and induced disorders

Substance abuse and dependence causes physical, mental, emotional, or social harm. Examples of abused drugs include opioids, stimulants, depressants, anxiolytics, and hallucinogens. (See *Understanding commonly abused substances.*) Chronic drug abuse, especially I.V. use, can lead to life-threatening complications, such as

cardiac and respiratory arrest, intracranial hemorrhage, acquired immunodeficiency syndrome, tetanus, subacute infective endocarditis, hepatitis, vasculitis, septicemia, thrombophlebitis, pulmonary emboli, gangrene, malnutrition and GI disturbances, respiratory infections, musculoskeletal dysfunction, trauma, depression, increased risk of suicide, and psychosis. Materials used to “cut” street drugs also can cause toxic or allergic reactions.

UNDERSTANDING COMMONLY ABUSED SUBSTANCES

Substance	Signs and symptoms	Interventions
Cannabinoids		
Marijuana		

▪ *Street names:* pot, grass, weed, Mary Jane, roach, reefer, joint, muggles, Acapulco gold, Texas tea, Yesca, hemp ▪ *Routes:* ingestion, smoking ▪ *Dependence:* psychological ▪ *Duration of effect:* 2 to 3 hours ▪ *Medical uses:* antiemetic for chemotherapy	▪ *Of use:* acute psychosis; agitation; amotivational syndrome; anxiety; asthma; bronchitis; conjunctival reddening; decreased muscle strength; delusions; distorted sense of time and self-perception; dry mouth; euphoria; hallucinations; impaired cognition, short-term memory, and mood; incoordination; increased hunger; increased systolic pressure when supine; orthostatic hypotension; paranoia; spontaneous laughter; tachycardia; and vivid visual imagery ▪ *Of withdrawal:* chills, decreased appetite, increased rapid-eyemovement sleep, insomnia, irritability, nervousness, restlessness, tremors, and weight loss	▪ Place the patient in a quiet room. ▪ Monitor his vital signs. ▪ Give supplemental oxygen for respiratory depression and I.V. fluids for hypotension. ▪ Give diazepam, as ordered, for extreme agitation and acute psychosis.
Depressants		
Alcohol		
▪ *Found in:* beer, wine, and distilled spirits; also contained in cough syrup, aftershave, and mouthwash ▪ *Route:* ingestion ▪ *Dependence*: physical and psychological ▪ *Duration of effect:* varies according to individual and amount ingested; metabolized at rate of 10 ml/hour ▪ *Medical uses:* neurolysis (absolute alcohol);	▪ *Of acute use:* coma, decreased inhibitions, euphoria followed by depression or hostility, impaired judgment, incoordination, respiratory depression, slurred speech, unconsciousness, and vomiting ▪ *Of withdrawal:* delirium, hallucinations, seizures, and tremors	▪ Place the patient in a quiet room. ▪ If alcohol was ingested within 4 hours, induce vomiting or perform gastric lavage; give activated charcoal and a saline cathartic. ▪ Monitor his vital signs. ▪ As ordered, give chlordiazepoxide every 4 hours to prevent withdrawal seizures, tremors, diaphoresis, anxiety, tachycardia, and hypertension.

emergency tocolytic; and treatment of ethylene glycol and methanol poisoning		Diazepam may be used if an I.V. route needs to be used. ▪ Institute seizure precautions. ▪ Provide I.V. fluid replacement as well as dextrose, thiamine, B-complex vitamins, and vitamin C to treat dehydration, hypoglycemia, and nutritional deficiencies. ▪ Assess for aspiration pneumonia. ▪ Prepare for dialysis if patient's vital functions are severely depressed.
Barbiturates (amobarbital, phenobarbital, secobarbital)		
▪ *Street names:* for barbiturates—barbs and downers; for amobarbital—blue angels and blue devils; for phenobarbital — goofballs and purple hearts; and for secobarbital—reds and red devils ▪ *Routes:* ingestion and injection ▪ *Dependence:* physical and psychological	▪ *Of use:* absent reflexes, blisters or bullous lesions, cyanosis, depressed level of consciousness (LOC) (from confusion to coma), fever, flaccid muscles, hypotension, hypothermia, nystagmus, paradoxical reaction in children and elderly people, poor pupil reaction to light, and respiratory depression ▪ *Of withdrawal:* agitation, anxiety, fever, insomnia, orthostatic hypotension, tachycardia, and tremors ▪ *Of rapid withdrawal:* anorexia, apprehension, hallucinations, orthostatic hypotension, tonic-clonic seizures, tremors, and weakness	▪ If ingestion was recent, induce vomiting or perform gastric lavage. Follow with activated charcoal. ▪ Monitor the patient's vital signs and perform frequent neurologic assessments. ▪ As ordered, give an I.V. fluid bolus for hypotension and alkalinized urine. ▪ Institute seizure precautions.

▪ *Duration:* 1 to 16 hours ▪ *Medical uses:* anesthetic, anticonvulsant, sedative, hypnotic		▪ Relieve withdrawal symptoms as ordered. ▪ Use a hypothermia or hyperthermia blanket for temperature alterations.
Benzodiazepines (alprazolam, chlordiazepoxide, clonazepam, clorazepate, diazepam, flurazepam, halazepam, lorazepam, midazolam, oxazepam, prazepam, quazepam, temazepam, triazolam)		
▪ *Street names:* dolls and yellow jackets ▪ *Routes:* ingestion and injection ▪ *Dependence:* physical and psychological ▪ *Duration of effect:* 4 to 8 hours ▪ *Medical uses:* anxiolytic, anticonvulsant, sedative, hypnotic	▪ *Of use:* ataxia, drowsiness, hypotension, increased self-confidence, relaxation, and slurred speech ▪ *Of overdose:* confusion, coma, drowsiness, and respiratory depression ▪ *Of withdrawal:* abdominal cramps, agitation, anxiety, diaphoresis, hypertension, tachycardia, tonic-clonic seizures, tremors, and vomiting	▪ If the drug was ingested, induce vomiting or perform gastric lavage. Follow with activated charcoal and a cathartic. ▪ Monitor the patient's vital signs. ▪ Give supplemental oxygen for hypoxia-induced seizures. ▪ As ordered, give I.V. fluids for hypertension, and physostigmine salicylate for respiratory or central nervous system (CNS) depression. Flumazenil, a specific benzodiazepine antagonist, can be used in cases of overdose to reverse the effects of the benzodiazepine.
Opiates (codeine, heroin, morphine, meperidine, and opium)		

▪ *Street names:* for heroin—junk, horse, H, smack, Chinese white, and Mexican mud; for morphine—morph, M, and microdots ▪ *Routes:* for codeine, meperidine, and morphine—ingestion, injection, and smoking; for heroin—ingestion, injection, inhalation, and smoking; for opium—ingestion and smoking ▪ *Dependence:* physical and psychological ▪ *Duration of effect*: 3 to 6 hours ▪ *Medical uses:* for codeine—analgesia and antitussive; for heroin—none; for morphine and meperidine—analgesia; for opium—analgesia and antidiarrheal	▪ *Of use:* anorexia, arrhythmias, clammy skin, constipation, constricted pupils, decreased LOC, detachment from reality, drowsiness, euphoria, hypotension, impaired judgment, increased pigmentation over veins, lack of concern, lethargy, nausea, needle marks, respiratory depression, seizures, shallow or slow respirations, skin lesions or abscesses, slurred speech, swollen or perforated nasal mucosa, thrombotic veins, urine retention, and vomiting ▪ *Of withdrawal:* abdominal cramps, anorexia, chills, diaphoresis, dilated pupils, hyperactive bowel sounds, irritability, nausea, panic, piloerection, runny nose, sweating, tremors, watery eyes, and yawning	▪ If the drug was ingested, induce vomiting or perform gastric lavage. ▪ As ordered, give naloxone until CNS effects are reversed. ▪ Give I.V. fluids to increase circulatory volume. ▪ Use extra blankets for hypothermia; if ineffective, use a hyperthermia blanket. ▪ Reorient the patient to time, place, and person. ▪ Assess breath sounds to monitor for pulmonary edema. ▪ Monitor for signs and symptoms of withdrawal. ▪ Naltrexone is an opiate antagonist that reverses the effects of the opiate.
Hallucinogens		
Lysergic acid diethylamide		
▪ *Street names:*	▪ *Of use:* abdominal cramps, arrhythmias,	▪ Place the patient in

LSD, acid, blue dots, cube, D, owsleys, gel tabs, and microdot ▪ *Routes:* ingestion, smoking ▪ *Dependence:* possibly psychological ▪ *Duration of effect:* 8 to 12 hours ▪ *Medical uses:* none	chills, depersonalization, diaphoresis, diarrhea, distorted visual perception and perception of time and space, dizziness, dry mouth, fever, grandiosity, hallucinations, heightened sense of awareness, hyperpnea, hypertension, illusions, increased salivation, muscle aches, mystical experiences, nausea, palpitations, seizures, tachycardia, and vomiting ▪ *Of withdrawal:* none	a quiet room. ▪ If the drug was ingested, induce vomiting or perform gastric lavage. Follow with activated charcoal and a cathartic. ▪ Monitor his vital signs, and give diazepam for seizures as ordered. ▪ Reorient the patient to time, place, and person, and restrain him as needed.
Phencyclidine		
▪ *Street names:* PCP, hog, angel dust, peace pill, dummy mist, aurora, bust bee, guerrilla, rocket fuel ▪ *Routes:* ingestion, injection, and smoking ▪ *Dependence:* possibly psychological ▪ *Duration of effect:* 30 minutes to several days ▪ *Medical uses:* veterinary anesthetic	▪ *Of use:* amnesia; blank stare; cardiac arrest; decreased awareness of surroundings; delusions; distorted body image; distorted sense of sight, hearing, and touch; drooling; euphoria; excitation and psychoses; fever; gait ataxia; hallucinations; hyperactivity; hypertensive crisis; individualized unpredictable effects; muscle rigidity; nystagmus; panic; poor perception of time and distance; possible chromosomal damage; psychotic behavior; recurrent coma; renal failure; seizures; sudden behavioral changes; tachycardia; and violent behavior ▪ *Of withdrawal:* none	▪ Place the patient in a quiet room. ▪ If the drug was ingested, induce vomiting or perform gastric lavage. Follow with activated charcoal. ▪ Add ascorbic acid to I.V. solution to acidify urine. ▪ Monitor the patient's vital signs and urine output. ▪ If ordered, give a diuretic; propranolol for hypertension or tachycardia; nitroprusside for severe hypertensive crisis; diazepam for seizures; diazepam or

		haloperidol for agitation or psychotic behavior; and physostigmine, diazepam, chlordiazepoxide, or chlorpromazine for a "bad trip."
Stimulants		
Amphetamines		
▪ *Street names:* for amphetamine sulfate —bennies, cartwheels, and grennies; for methamphetamine —speed, meth, and crystal; and for dextroamphetamine sulfate—dexies, hearts, and oranges ▪ *Routes:* ingestion and injection ▪ *Dependence:* psychological ▪ *Duration of effect:* 1 to 4 hours ▪ *Medical uses:* hyperkinesis, narcolepsy, and weight control	▪ *Of use:* altered mental status (from confusion to paranoia), coma, diaphoresis, dilated reactive pupils, dry mouth, exhaustion, hallucinations, hyperactive deep tendon reflexes, hypertension, hyperthermia, paradoxical reaction in children, psychotic behavior with prolonged use, seizures, shallow respirations, tachycardia, and tremors ▪ *Of withdrawal:* abdominal tenderness, apathy, depression, disorientation, irritability, long periods of sleep, and muscle aches, or suicide (with sudden withdrawal)	▪ Place the patient in a quiet room. ▪ If the drug was ingested, induce vomiting or perform gastric lavage; give activated charcoal and a saline or magnesium sulfate cathartic. ▪ Add ammonium chloride or ascorbic acid to I.V. solution to acidify urine to a pH of 5. Also, administer mannitol to induce diuresis, as ordered. ▪ Monitor the patent's vital signs. ▪ As ordered, give a short-acting barbiturate, such as pentobarbital, for seizures; haloperidol for assaultive behavior; phentolamine for hypertension;

		propranolol for tachyarrhythmias; and lidocaine for ventricular arrhythmias. ▪ Restrain the patient if he's experiencing hallucinations or paranoia. ▪ Give a tepid sponge bath for fever. ▪ Institute suicide precautions.
Cocaine		
▪ *Street names:* coke, flake, snow, nose candy, hits, gold dust, toot, crack (hardened form), rock, and crank ▪ *Routes:* ingestion, injection, sniffing, and smoking ▪ *Dependence:* psychological ▪ *Duration of effect:* 15 minutes to 2 hours; with crack, rapid high of short duration followed by down feeling ▪ *Medical uses:* local anesthetic	▪ *Of use:* abdominal pain; alternating euphoria and fear; anorexia; cardiotoxicity, such as ventricular fibrillation or cardiac arrest; coma; confusion; diaphoresis; dilated pupils; excitability; fever; grandiosity; hyperpnea; hypotension or hypertension; insomnia; irritability; nausea and vomiting; pallor or cyanosis; perforated nasal septum with prolonged use; pressured speech; psychotic behavior with large doses; respiratory arrest; seizures; spasms; tachycardia; tachypnea; visual, auditory, and olfactory hallucinations; and weight loss ▪ *Of withdrawal:* anxiety, depression, and fatigue	▪ Place the patient in a quiet room. ▪ If cocaine was ingested, induce vomiting or perform gastric lavage. Follow with activated charcoal and a saline cathartic. ▪ If cocaine was sniffed, remove residual drug from mucous membranes. ▪ Monitor the patient's vital signs. ▪ Give propranolol for tachycardia. ▪ Perform cardiopulmonary resuscitation for ventricular fibrillation and cardiac arrest, as indicated. ▪ Give a tepid sponge bath for fever.

	▪ Administer an anticonvulsant, as ordered, for seizures.

Psychoactive drug abuse can occur at any age. Experimentation with drugs commonly begins in adolescence or even earlier. In many cases, drug abuse leads to addiction, which may involve physical or psychological dependence or both. The most dangerous form of abuse occurs when users mix several drugs simultaneously —including alcohol.

Causes and incidence

Psychoactive drug abuse commonly results from a combination of low self-esteem, peer pressure, inadequate coping skills, and curiosity. Most people who are predisposed to drug abuse have few mental or emotional resources against stress, an overdependence on others, and a low tolerance for frustration. Taking the drug gives them pleasure by relieving tension, abolishing loneliness, allowing them to achieve a temporarily peaceful or euphoric state, or simply relieving boredom.

Drug dependence may follow experimentation with drugs in response to peer pressure. It also may follow the use of drugs to relieve physical pain, but this is uncommon.

Complications

- Cardiac and respiratory arrest
- Intracranial hemorrhage
- Acquired immunodeficiency syndrome
- Subacute bacterial endocarditis
- Hepatitis
- Septicemia
- Pulmonary emboli

- Gangrene

Signs and symptoms

The signs and symptoms of acute intoxication vary, depending on the drug. The drug user seldom seeks treatment specifically for his drug problem. Instead, he may seek emergency treatment for drug-related injuries or complications, such as a motor vehicle accident, burns from freebasing, an overdose, physical deterioration from illness or malnutrition, or symptoms of withdrawal. Friends, family members, or law enforcement officials may bring the patient to the hospital because of respiratory depression, unconsciousness, acute injury, or a psychiatric crisis.

Examine the patient for signs and symptoms of drug use or drug-related complications as well as for clues to the type of drug ingested. For example, fever can result from stimulant or hallucinogen intoxication, from withdrawal, or from infection caused by I.V. drug use.

Inspect the eyes for lacrimation from opiate withdrawal, nystagmus from central nervous system (CNS) depressants or phencyclidine intoxication, and drooping eyelids from opiate or CNS depressant use. Constricted pupils occur with opiate use or withdrawal; dilated pupils, with the use of hallucinogens or amphetamines.

Examine the nose for rhinorrhea from opiate withdrawal and the oral and nasal mucosa for signs of drug-induced irritation. Drug sniffing can result in inflammation, atrophy, or perforation of the nasal mucosa. Dental conditions commonly result from the poor oral hygiene associated with chronic drug use. Also inspect under the tongue for evidence of I.V. drug injection.

Inspect the skin. Sweating, a common sign of intoxication with opiates or CNS stimulants, also accompanies most drug withdrawal syndromes. Drug use sometimes induces a sensation of bugs crawling on the skin, known as formication; as a result, the patient's skin may be excoriated from scratching.

Needle marks or tracks are an obvious sign of I.V. drug abuse. Keep in mind that the patient may attempt to conceal or disguise injection sites with tattoos or by selecting an inconspicuous site such as under the

nails. In addition, self-injection can sometimes cause cellulitis or abscesses, especially in the patient who also is a chronic alcoholic. Puffy hands can be a late sign of thrombophlebitis or of fascial infection due to self-injection on the hands or arms.

Auscultation may disclose bilateral crackles and rhonchi caused by smoking and inhaling drugs or by opiate overdose. Other cardiopulmonary signs of overdose include pulmonary edema, respiratory depression, aspiration pneumonia, and hypotension. CNS stimulants and some hallucinogens may cause refractory acuteonset hypertension or cardiac arrhythmias. Withdrawal from opiates or depressants also can provoke arrhythmias and, occasionally, hypotension.

During opiate withdrawal, the patient may report abdominal pain, nausea, or vomiting. He may also complain of hemorrhoids, a consequence of the constipating effects of these drugs. Palpation of an enlarged liver, with or without tenderness, may indicate hepatitis.

Neurologic symptoms of drug abuse include tremors, hyperreflexia, hyporeflexia, and seizures. Abrupt withdrawal may precipitate signs of CNS depression (ranging from lethargy to coma), hallucinations, or signs of overstimulation, including euphoria and violent behavior.

Carefully review the patient's medical history. Suspect drug abuse if he reports a painful injury or chronic illness but refuses a diagnostic workup. In his attempt to obtain drugs, the dependent patient may feign illnesses, such as migraine headaches, myocardial infarction, and renal colic; claim an allergy to over-the-counter analgesics; or even request a specific medication. Also be alert for a history of overdose or a high tolerance for potentially addictive

drugs. An I.V. drug user may have a history of hepatitis or human immunodeficiency virus (HIV) infection from sharing dirty needles. A female drug user may report a history of amenorrhea.

A patient who abuses drugs may give you a fictitious name and address, be reluctant to discuss previous hospitalizations, or seek treatment at a medical facility across town rather than in his own neighborhood. If

possible, obtain the patient's previous medical records and interview family members to verify his responses.

If the patient admits to drug use, try to determine the extent to which this behavior interferes with his normal functioning. Note whether he expresses a desire to overcome his dependence on drugs. If possible, obtain a drug history consisting of substances ingested, amount, frequency, and last dose. Expect incomplete or inaccurate responses. Drug-induced amnesia, a depressed level of consciousness, or ignorance may distort the patient's recollection of the facts; he also may fabricate answers to avoid arrest or to conceal a suicide attempt.

The abuse of psychoactive substances may cause a need for dosage adjustments to prescribed medications. Cross-tolerance occurs when one drug that has particular properties results in tolerance of another drug. Drugs with similiar pharmacological properties, such as central nervous system depressants, will cause the need for more of a similar class of drug to get the same response. This may occur, for example, when a patient on an opiate goes to surgery. More anesthesia is needed for this patient than is needed for an opiate-naive patient.

The hospitalized drug abuser is likely to be uncooperative, disruptive, or even violent. He may experience mood swings, anxiety, impaired memory, sleep disturbances, flashbacks, slurred speech, depression, and thought disorders. He may resort to plays on sympathy, bribery, or threats to obtain drugs, or he may try to pit one caregiver against another.

Psychoactive substances may be used in cultural practices. For instance, some Native Americans use hallucinatory drugs to help achieve spiritual experiences. Therefore, use and abuse must be carefully distinguished.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing substance dependence and related disorders*, page 1265. Various tests can confirm drug use, determine the amount and type of drug taken, and reveal complications. For example, a serum or urine drug screen can detect recently ingested substances.

Characteristic findings in other tests include elevated serum globulin levels, hypoglycemia, leukocytosis, liver function abnormalities, positive

Venereal Disease Research Laboratory test results, positive rapid plasma reagin test results due to elevated protein fractions, an elevated mean corpuscular hemoglobin level, elevated uric acid levels, and reduced blood urea nitrogen levels.

Treatment

The patient with acute drug intoxication should receive symptomatic treatment based on the drug ingested. Measures include fluid replacement therapy and nutritional and vitamin supplements, if indicated; detoxification with the same drug or a pharmacologically similar drug (exceptions include cocaine, hallucinogens, and marijuana, which aren't used for detoxification); sedatives to induce sleep; anticholinergics and antidiarrheals to relieve GI distress; anxiolytics for severe agitation, especially in cocaine abusers; and symptomatic treatment of complications. Depending on the dosage and time elapsed before admission, additional treatment may include gastric lavage, induced emesis, activated charcoal, forced diuresis and, possibly, hemoperfusion or hemodialysis.

Treatment of drug dependence commonly involves a triad of care: detoxification, short- and long-term rehabilitation, and aftercare; the latter means a lifetime of abstinence, usually aided by participation in Narcotics Anonymous (NA) or a similar self-help group.

Detoxification, the controlled and gradual withdrawal of an abused drug, is achieved through substituting a drug with a similar action. Such gradual replacement

of the abused drug controls the effects of withdrawal, thereby reducing the patient's discomfort and associated risks.

Depending on which drug the patient has abused, detoxification may be managed on an inpatient or outpatient basis. For example, withdrawal from depressants can produce hazardous adverse reactions, such as generalized tonic-clonic seizures, status epilepticus, and hypotension. The severity of these reactions determines whether the patient can be safely treated as an outpatient or if he requires hospitalization. Withdrawal from depressants usually requires detoxification because

abrupt or poorly managed withdrawal from barbiturates can cause death.

Opioid withdrawal causes severe physical discomfort and can be life threatening. To minimize these effects, chronic opioid abusers commonly are detoxified with methadone.

To ease withdrawal from opioids, depressants, and other drugs, useful nonchemical measures may include psychotherapy, exercise, relaxation techniques, and nutritional support. Sedatives and tranquilizers may be administered temporarily to help the patient cope with insomnia, anxiety, and depression.

Buprenorphine with naloxone (Suboxone) is another drug that's being used to lessen craving in opiate-addicted patients. Naloxone is an opiate antagonist; it blocks opiate receptors. A person taking Suboxone won't respond to the effects of other opioids.

After withdrawal, the patient needs to participate in a rehabilitation program to prevent a recurrence. Rehabilitation programs are available for inpatients and outpatients; they usually last a month or longer and may include individual, group, and family psychotherapy. During and after rehabilitation, participation in a drugoriented self-help group may be helpful. The largest such group is NA.

Special considerations

Focus on restoring the patient's physical health, educating him and his family about drug abuse and dependence, providing support, and encouraging participation in drug treatment programs and self-help groups.

During an acute episode:

- Continuously monitor the patient's vital signs, and observe for complications of overdose and withdrawal, such as cardiopulmonary arrest, seizures, and aspiration.
- Based on standard hospital policy, institute appropriate measures to prevent suicide attempts.
- Give medications, as ordered, to decrease withdrawal symptoms; monitor and record their effectiveness.

- Maintain a quiet, safe environment during withdrawal from any drug because excessive noise may agitate the patient.
- Remove harmful objects from the patient's room, and use restraints only if you suspect that he might harm himself or others. Institute seizure precautions.

After an acute episode:

- Learn to control your reactions to the patient's undesirable behaviors—commonly, psychological dependency, manipulation, anger, frustration, and alienation.
- Set limits for dealing with demanding, manipulative behavior.
- Promote adequate nutrition and monitor the patient's nutritional intake.
- Administer medications carefully to prevent hoarding by the patient. Check the patient's mouth to ensure that he has swallowed the medication. Closely monitor visitors who might supply the patient with drugs.
- Refer the patient for detoxification and rehabilitation, as appropriate. Give him a list of available resources.
- Encourage family members to seek help whether or not the abuser seeks it. You can suggest private therapy or community mental health clinics.

If the patient refuses to participate in a rehabilitation program, teach him how to minimize the risk of drug-related complications, as follows:

- Review measures for preventing HIV infection and hepatitis. Stress that these infections are readily transmitted by sharing needles with other drug users and by having unprotected sexual intercourse.
- Advise the patient to use a new needle for every injection or to clean needles with a solution of chlorine bleach and water.

- Emphasize the importance of using a condom during intercourse to prevent disease transmission and pregnancy. If necessary, teach the

female drug abuser about other methods of birth control. Explain the devastating effects of drugs on the developing fetus.

PSYCHOTIC DISORDERS

Schizophrenia

Schizophrenia is characterized by disturbances (for at least 6 months) in thought content and form, perception, affect, sense of self, volition, interpersonal relationships, and psychomotor behavior. (See *Phases of schizophrenia,* page 1276.) The *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (*DSM-IVTR*), recognizes paranoid, disorganized, catatonic, undifferentiated, and residual schizophrenia. Onset of symptoms usually occurs during adolescence or early adulthood. The disorder produces varying degrees of impairment. Up to one-third of patients with schizophrenia have just one psychotic episode and no more. Some patients have no disability between periods of exacerbation; others need continuous institutional care. The prognosis worsens with each episode.

Causes and incidence

Schizophrenia affects 1% to 2% of the population in the United States and is equally prevalent in both sexes. It may result from a combination of genetic, biological, cultural, and psychological factors. Some evidence supports a genetic predisposition. Close relatives of people with schizophrenia have a greater likelihood of developing schizophrenia; the closer the degree of biological relatedness, the higher the risk.

The most widely accepted biochemical theory holds that schizophrenia results from excessive activity at dopaminergic synapses. Other neurotransmitter alterations, such as serotonin increases, may also contribute to schizophrenic symptoms. In addition, patients with schizophrenia have structural abnormalities of the frontal and temporolimbic systems. Computed tomography scans and magnetic resonance imaging studies show various structural brain abnormalities, including frontal lobe atrophy and increased lateral and third ventricles.

Positron emission tomography scans substantiate frontal lobe hypometabolism.

Numerous psychological and sociocultural causes, such as disturbed family and interpersonal patterns, also have been proposed. Schizophrenia is more common in lower socioeconomic groups, possibly due to downward social drift, lack of upward socioeconomic mobility, and high stress levels that may stem from poverty, social failure, illness, and inadequate social resources. Higher incidence is also linked to low birth weight and congenital deafness.

Signs and symptoms

Schizophrenia is associated with many abnormal behaviors; therefore, signs and symptoms vary widely, depending on the type and phase (prodromal, active, or residual) of the illness.

Watch for these signs and symptoms:

- ambivalence—coexisting strong positive and negative feelings, leading to emotional conflict
- apathy and other affective abnormalities
- clang associations—words that rhyme or sound alike used in an illogical, nonsensical manner—for instance, “It's the rain, train, pain”
- concrete associations—inability to form or understand abstract thoughts
- delusions—false ideas or beliefs accepted as real by the patient; delusions of grandeur, persecution, and reference (distorted belief regarding the relation between events and one's self—for example, a belief that television programs address the patient on a personal level); feelings of being controlled, somatic illness, and depersonalization
- echolalia—automatic and meaningless repetition of another's words or phrases
- echopraxia—involuntary repetition of movements observed in others
- flight of ideas—rapid succession of incomplete and loosely connected ideas

PHASES OF SCHIZOPHRENIA

Schizophrenia usually occurs in three phases: prodromal, active, and residual.

Prodromal phase

The *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision *(DSM-IV-TR),* characterizes the prodromal phase as clear deterioration in functioning before the active phase of the disturbance that isn't due to a disturbance in mood or to a psychoactive substance use disorder and that involves at least two of the following signs and symptoms:

- marked social isolation or withdrawal
- marked impairment in role functioning as wage-earner, student, or homemaker
- markedly peculiar behavior
- marked impairment in personal hygiene and grooming
- blunted or inappropriate affect
- digressive, vague, overelaborate, or circumstantial speech; poverty of speech; or poverty of content of speech
- odd beliefs or magical thinking influencing behavior and inconsistent with cultural norms
- unusual perceptual experiences
- marked lack of initiative, interests, or energy.

Family members or friends may report personality changes. Typically insidious, this phase may extend over several months or years.

Active phase

During the active phase, the patient exhibits frankly psychotic symptoms. Psychiatric evaluation may reveal delusions, hallucinations, loosening of associations, incoherence, and catatonic behavior. The patient's psychosocial history may also disclose a particular stressor before the onset of this phase.

Residual phase

According to the *DSM-IV-TR,* the residual phase follows the active phase and occurs when at least two of the symptoms noted in the prodromal phase persist. These symptoms don't result from a disturbance in mood or from a psychoactive substance use disorder.

The residual phase resembles the prodromal phase, except that disturbances in affect and role functioning usually are more severe. Delusions and hallucinations may persist.

- hallucinations—false sensory perceptions with no basis in reality; usually visual or auditory, but may also be olfactory (smell), gustatory (taste), or tactile (touch)
- loose associations—rapid shifts among unrelated ideas
- magical thinking—belief that thoughts or wishes can control others or events
- neologisms—bizarre words that have meaning only for the patient
- poor interpersonal relationships
- regression—return to an earlier developmental stage
- thought blocking—sudden interruption in the patient's train of thought
- withdrawal—disinterest in objects, people, or surroundings
- word salad—illogical word groupings, such as “She had a star, barn, plant.”

Diagnosis

After a complete physical and psychiatric examinations rule out an organic cause of symptoms such as an amphetamineinduced psychosis, a diagnosis of schizophrenia may be considered. A diagnosis is made if the patient's symptoms match those in the *DSM-IV-TR*. (See *Diagnosing schizophrenia*.)

Treatment

In schizophrenia, treatment focuses on meeting the physical and psychosocial needs of the patient, based on his previous level of adjustment and his response to

medical and nursing interventions. Treatment may combine drug therapy, long-term psychotherapy for the patient and his family, psychosocial rehabilitation, vocational counseling, and the use of community resources.

DIAGNOSING SCHIZOPHRENIA

The following criteria described in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, are used to diagnose a person with schizophrenia.

Characteristic symptoms

A person with schizophrenia has two or more of the following symptoms (each present for a significant time during a 1-month period—or less if successfully treated):

- delusions
- hallucinations
- disorganized speech
- grossly disorganized or catatonic behavior
- negative symptoms (affective flattening, alagia, anhedonia, attention impairment, apathy, and avolition).

The diagnosis requires only one of these characteristic symptoms if the person's delusions are bizarre, or if hallucinations consist of a voice issuing a running commentary on the person's behavior or thoughts or two or more voices conversing.

Social and occupational dysfunction

For a significant period since the onset of the disturbance, one or more major areas of functioning (such as work, interpersonal relations, or self-care) are markedly below the level achieved before the onset.

When the disturbance begins in childhood or adolescence, the dysfunction takes the form of failure to achieve the expected level of interpersonal, academic, or occupational development.

Duration

Continuous signs of the disturbance persist for at least 6 months. The 6-month period must include at least 1 month of symptoms (or less if signs and symptoms have been successfully treated) that match the characteristic symptoms and may include periods of prodromal or residual symptoms.

During the prodromal or residual period, signs of the disturbance may be manifested by only negative symptoms or by two or more characteristic symptoms in a less severe form.

Schizoaffective and mood disorder exclusion

Schizoaffective disorder and mood disorder with psychotic features have been ruled out for these reasons: Either no major depressive, manic, or mixed episodes have occurred concurrently with the active-phase symptoms, *or,* if mood disorder episodes have occurred during active-phase symptoms, their total duration has

been brief relative to the duration of the active and residual periods.

Substance and general medical condition exclusion

The disturbance isn't due to the direct physiologic effects of a substance or a general medical condition.

Relationship to a pervasive developmental disorder

If the person has a history of autistic disorder or another pervasive developmental disorder, the additional diagnosis of schizophrenia is appropriate only if prominent delusions or hallucinations are also present for at least 1 month (or less if successfully treated).

The primary treatment for more than 30 years, antipsychotic drugs (also called neuroleptic drugs) appear to work by blocking postsynaptic dopamine receptors. These drugs reduce the incidence of positive psychotic symptoms, such as hallucinations and delusions, and relieve anxiety and agitation. Newer antipsychotics are effective in relieving positive and negative symptoms of schizophrenia. Other psychiatric drugs, such as antidepressants and anxiolytics, may control associated signs and symptoms.

Certain antipsychotic drugs are associated with numerous adverse reactions, some of which are irreversible. (See *Reviewing adverse effects of antipsychotic drugs*.) The newer antipsychotic drugs appear to be effective in treating the negative symptoms of schizophrenia (withdrawal, apathy, or blunted affect). However, these drugs have problematic adverse effects. Antipsychotic drugs are broken down into two major classes: dopamine receptor antagonists (haloperidol and thorazine) and dopamine-serotonin antagonists, also called *atypical antipsychotics* (risperidone and clozapine). The long-acting drugs haloperidol and fluphenazine may be given I.M. every 3 to 4 weeks to improve compliance.

Clozapine may be prescribed for severely ill patients who fail to respond to standard treatment. This drug effectively controls more psychotic signs and symptoms without the usual adverse effects. However,

clozapine can cause drowsiness, sedation, excessive salivation, tachycardia, dizziness, and seizures. Agranulocytosis, a potentially fatal blood disorder characterized by a low white blood cell count and pronounced neutropenia, may also occur; therefore, patients on clozapine must be monitored closely with frequent complete blood counts. Risperidone and olanzapine, like clozapine, have reduced the incidence of adverse effects, including extrapyramidal symptoms and anticholinergic adverse effects. These new antipsychotics may cause weight gain, hormone irregularities, and diabetes.

Routine blood monitoring is essential to detect the estimated 1% to 2% of all patients taking clozapine who develop agranulocytosis. If caught in the early stages, this disorder is reversible.

Clinicians disagree about the effectiveness of psychotherapy in treating the patient with schizophrenia. Some consider it a useful adjunct to drug therapy. Others suggest that psychosocial rehabilitation, education, and social skills training are more effective for chronic schizophrenia. In addition to improving understanding of the disorder, these methods teach the patient and his family coping strategies, effective communication techniques, and social skills.

Because schizophrenia typically disrupts the family, family therapy may be helpful to reduce guilt and disappointment as well as improve acceptance of the patient and his bizarre behavior.

Special considerations

- Assess the patient's ability to carry out activities of daily living, paying special attention to his nutritional status. Monitor his weight if he isn't eating. If he thinks that his food is poisoned, let him fix his own food when possible or offer foods in closed containers that he can open. If you give liquid medication in a unit-dose container, allow the patient to open the container.
- Maintain a safe environment, minimizing stimuli. Administer prescribed medications to decrease symptoms and anxiety. Use physical restraints according to your hospital's policy to ensure the patient's safety and that of others.

- Adopt an accepting and consistent approach with the patient. Short, repeated contacts are best until trust has been established.
- Avoid promoting dependence. Reward positive behavior to help the patient improve his level of functioning.
- Engage the patient in reality-oriented activities that involve human contact, such as inpatient social skills training groups, outpatient day care, and sheltered workshops.

Provide reality-based explanations for distorted body images or hypochondriacal complaints. Explain to the patient that his private language, autistic inventions, or neologisms aren't understood. Set limits on inappropriate behavior.

REVIEWING ADVERSE EFFECTS OF ANTIPSYCHOTIC DRUGS

The newer atypical drugs, such as risperidone, olanzapine, quetiapine, sertindole, and ziprasidone, produce fewer extrapyramidal symptoms than the first, older class of antipsychotics. Risperidone is associated with increases in serum prolactin. Olanzapine, in moderate doses, induces little extrapyramidal symptoms, but has been associated with weight gain and blood glucose abnormalities. Quetiapine can cause weight gain, hypotension, and sedation.

Older classes of antipsychotic drugs (sometimes known as *neuroleptic drugs*) can cause sedative, anticholinergic, or extrapyramidal effects; orthostatic hypotension; and, rarely, neuroleptic malignant syndrome.

Sedative, anticholinergic, and extrapyramidal effects

High-potency drugs (such as haloperidol) are minimally sedative and anticholinergic but cause a high incidence of extrapyramidal adverse effects. Intermediate-potency drugs (such as molindone) are associated with a

moderate incidence of adverse effects, whereas low-potency drugs (such as chlorpromazine) are highly sedative and anticholinergic but produce few extrapyramidal adverse effects.

The most common extrapyramidal effects are dystonia, parkinsonism, and akathisia. Dystonia usually occurs in young male patients within the first few days of treatment. Characterized by severe tonic contractions of the muscles in the neck, mouth, and tongue, dystonia may be misdiagnosed as a psychotic symptom. Diphenhydramine or benztropine administered I.M. or I.V. provides rapid relief from this symptom.

Drug-induced parkinsonism results in bradykinesia, muscle rigidity, shuffling or propulsive gait, stooped posture, flat facial affect, tremors, and drooling. Parkinsonism may occur from 1 week to several months after the initiation of drug treatment. Drugs prescribed to reverse or prevent this syndrome include benztropine, trihexyphenidyl, and amantadine.

Tardive dyskinesia can occur after only 6 months of continuous therapy and is usually irreversible. No effective treatment is available for this disorder, which is characterized by various involuntary movements of the mouth and jaw; flapping or writhing; purposeless, rapid, and jerky movements of the arms and legs; and dystonic posture of the neck and trunk.

Signs and symptoms of akathisia include restlessness, pacing, and an inability to rest or sit still. Akathisia may be misinterpreted as agitation or a worsening of psychotic behavior. Propranolol relieves this adverse effect.

Orthostatic hypotension

Low-potency neuroleptics can cause orthostatic hypotension because they block alpha-adrenergic receptors. If hypotension is severe, the patient is placed in the supine position and given I.V. fluids for hypovolemia. If further treatment is needed, an alpha-adrenergic agonist, such as norepinephrine or metaraminol, may be ordered to relieve hypotension. Mixed alpha- and beta-adrenergic drugs (such as epinephrine) or beta-adrenergic drugs (such as isoproterenol) shouldn't be given because they can further reduce blood pressure.

Neuroleptic malignant syndrome

Neuroleptic malignant syndrome is a life-threatening syndrome that occurs in up to 1% of patients taking antipsychotic drugs. Signs and symptoms include fever, muscle rigidity, and altered level of consciousness occurring hours to months after initiating drug therapy or increasing the dose. Treatment is symptomatic, largely consisting of dantrolene and other measures to counter muscle rigidity associated with hyperthermia. You'll need to monitor vital signs and mental status continuously.

- If the patient is hallucinating, explore the content of the hallucinations. If he hears voices, find out if he believes that he must do what they command. Explore the emotions connected with the hallucinations, but don't argue about them. If possible, change the subject.
- Assist the patient to recognize the nonreality of his hallucinatory experience.
- Teach the patient techniques that interrupt the hallucinations (listening to an audiocassette player, singing out loud, or reading out loud).

- Don't tease or joke with a patient with schizophrenia. Choose words and phrases that are unambiguous and clearly understood. For instance, a patient who's told, “That procedure will be done on the floor,” may become frightened, thinking he'll need to lie down on the floor.
- If the patient expresses suicidal thoughts, institute suicide precautions. Document his behavior and your actions.
- If he's expressing homicidal thoughts (for example, “I have to kill my mother”), institute homicidal precautions. Notify the physician and the potential victim. Document the patient's comments and the names of those who were notified.
- Don't touch the patient without telling him first exactly what you're going to do— for example, “I'm going to put this cuff on your arm so I can take your blood pressure.”
- If necessary, postpone procedures that require physical contact with hospital personnel until the patient is less suspicious or agitated.
- Remember, institutionalization may produce symptoms and disabilities that aren't part of the patient's illness, so evaluate symptoms carefully.
- Mobilize community resources to provide a support system for the patient. Ongoing support is essential to his mastery of social skills.
- Encourage adherence with the medication regimen to prevent a relapse. Also, monitor the patient carefully for adverse reactions to drug therapy, including acute dystonia, drug-induced parkinsonism, akathisia, tardive dyskinesia, and neuroleptic malignant syndrome. Document and report such reactions promptly.
- Help the patient explore possible connections between anxiety and stress and the exacerbation of symptoms.

For catatonic schizophrenia:

- Assess for physical illness. Remember that the mute patient won't complain of pain or physical symptoms; if he's in a bizarre posture, he's at risk for pressure ulcers or decreased circulation to a body area.

- Meet the patient's physical needs for adequate food, fluid, exercise, and elimination; follow orders with respect to nutrition, urinary catheterization, and enema.
- Provide range-of-motion exercises for the patient or help him ambulate every 2 hours.
- Prevent physical exhaustion and injury during periods of hyperactivity.
- Tell the patient directly, specifically, and concisely which procedures need to be done. For example, you might say to the patient, “It's time to go for a walk. Let's go.” Don't offer the negativistic patient a choice.
- Spend some time with the patient even if he's mute and unresponsive. He's acutely aware of his environment even though he seems not to be. Your presence can be reassuring and supportive.
- Verbalize for the patient the message that his nonverbal behavior seems to convey; encourage him to do so as well.
- Offer reality orientation. You might say, “The leaves on the trees are turning colors and the air is cooler. It's fall!” Emphasize reality in all contacts to reduce distorted perceptions.
- Stay alert for violent outbursts; if they occur, get help promptly to ensure the patient's safety and your own.

For paranoid schizophrenia:

- When the patient is newly admitted, minimize his contact with the hospital staff.
- Don't crowd the patient physically or psychologically; he may strike out to protect himself.

- Be flexible; allow the patient some control. Approach him in a calm and unhurried manner. Let him talk about anything he wishes initially, but keep the conversation light and social. Avoid entering into power struggles.
- Respond to the patient's condescending attitudes (arrogance, put-downs, sarcasm, or open hostility) with neutral remarks.

- Don't let the patient put you on the defensive, and don't take his remarks personally. If he tells you to leave him alone, do leave but return soon. Brief contacts with the patient may be most useful at first.
- Don't make attempts to combat the patient's delusions with logic. Instead, respond to feelings, themes, or underlying needs—for example, “It seems you feel you've been treated unfairly.”
- Be honest and dependable. Don't threaten the patient or make promises that you can't fulfill.
- If the patient is taking clozapine, stress the importance of returning weekly or biweekly to the hospital or an outpatient setting to have his blood monitored.
- Teach the patient the importance of adhering to the medication regimen. Tell him to report any adverse reactions instead of discontinuing the drug. If he takes a slowrelease formulation, make sure that he understands when to return to the physician for his next dose.
- Involve the patient's family in his treatment. Teach them how to recognize an impending relapse, and suggest ways to manage symptoms, such as tension, nervousness, insomnia, decreased ability to concentrate, and apathy.

Delusional disorders

According to the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, delusional disorders are marked by false beliefs with a plausible basis in reality. Formerly referred to as paranoid disorders, delusional disorders involve erotomanic, grandiose, jealous, somatic, or persecutory themes. (See *Delusional themes,* page 1282.) Some patients experience several types of delusions, whereas others experience unspecified delusions with no dominant theme. Typically chronic, these disorders commonly interfere with social and marital relationships, but seldom impair intellectual or occupational functioning significantly.

Causes and incidence

Delusional disorders of later life strongly suggest a hereditary predisposition. At least one study has linked the development of delusional disorders to inferiority feelings in the family. Some researchers suggest that delusional disorders are the product of specific early childhood experiences with an authoritarian family structure. Others hold that anyone with a sensitive personality is particularly vulnerable to developing a delusional disorder.

Certain medical conditions—head injury, chronic alcoholism, and deafness— and aging are known to increase the risks of delusional disorders. Predisposing factors linked to aging include isolation, lack of stimulating interpersonal relationships, physical illness, and impaired hearing and vision. In addition, severe stress (such as a move to a foreign country) may cause a delusional disorder.

Delusional disorders commonly begin in middle or late adulthood, usually between ages 40 and 55, but they can occur at a younger age. These uncommon illnesses affect less than 1% of the population; the incidence is about equal in men and women.

Complications

- Violent behavior
- Suicide

Signs and symptoms

The psychiatric history of a delusional patient may be unremarkable, aside from behavior related to his delusions. He's likely to report problems with social and marital relationships, including depression or sexual dysfunction. He may describe a life marked by social isolation or hostility. He may deny feeling lonely, relentlessly criticizing or placing unreasonable demands on others.

Gathering accurate information from a delusional patient may prove difficult. He may deny his feelings, disregard the circumstances that lead to his hospitalization,

and refuse treatment. However, his responses and behavior during the

assessment interview provide clues that can help to identify his disorder. Family members may confirm your observations—for example, by reporting that the patient is chronically jealous or suspicious.

DELUSIONAL THEMES

In a patient with a delusional disorder, the delusions usually are well systematized and follow a predominant theme. Common delusional themes are discussed below.

Erotomanic delusions

This prevalent delusional theme concerns romantic or spiritual love. The patient believes that he shares an idealized (rather than sexual) relationship with someone of higher status—a superior at work, a celebrity, or an anonymous stranger.

The patient may keep this delusion secret, but more commonly will try to contact the object of his delusion by phone calls, letters (including e-mail), gifts, or even stalking. He may attempt to rescue his beloved from imagined danger. Many patients with erotomanic delusions harass public figures and come to the attention of the police.

Grandiose delusions

The patient with grandiose delusions believes that he has great, unrecognized talent, special insights, prophetic power, or has made an important discovery. To achieve recognition, he may contact government agencies such as the Federal Bureau of Investigation. The patient with a religion-oriented delusion of grandeur may become a cult leader. Less commonly, he believes that he shares a special relationship with some wellknown personality, such as a rock star or a world leader. He may believe himself to be a famous person, his identity usurped by an imposter.

Jealous delusions

Jealous delusions focus on infidelity. For example, a patient may insist that his spouse or lover has been unfaithful, and may search for evidence to justify the delusion such as spots on bed sheets. He may confront his partner, try to control her movements, follow her, or try to track down her suspected lover. He may physically assault her or, less likely, his perceived rival.

Somatic delusions

Somatic delusions center on an imagined physical defect or deformity. The patient may perceive a foul odor coming from his skin, mouth, rectum, or another body part. Other delusions involve skin-crawling insects, internal parasites, or physical illness.

Persecutory delusions

The patient suffering from persecutory delusions, the most common type of delusion, believes that he's being followed, harassed, plotted against, poisoned, mocked, or deliberately prevented from achieving his long-term goals. These delusions may evolve into a simple or complex persecution scheme, in which even the slightest injustice is interpreted as part of the scheme.

Such a patient may file numerous lawsuits or seek redress from government agencies (querulous paranoia). A patient who becomes resentful and angry may lash out violently against the alleged offender.

Note how well the patient communicates. He may be evasive or reluctant to answer questions. Conversely, he may be overly talkative, explaining events in great

detail and emphasizing what he has achieved, prominent people he knows, or places where he has traveled. Statements that first seem logical may later prove irrelevant. Some of his answers may be contradictory, jumbled, or irrational.

Be alert for expressions of denial, projection, and rationalization. Once delusions become firmly entrenched, the patient will no longer seek to justify his beliefs. However, if he's still struggling to maintain his delusional defenses, he may make statements that reveal his condition, such as “People at work won't talk to me because I'm smarter than them.” Accusatory statements are also characteristic of the delusional patient. Record pervasive delusional themes (for example, grandiose or persecutory).

Also watch for nonverbal cues, such as excessive vigilance or obvious apprehension on entering the room. During questions, the patient may listen intently, reacting defensively to imagined slights or insults. He may sit at the edge of his seat or fold his arms as if to shield himself. If he carries papers or money, he may clutch them firmly.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing delusional disorders,* page 1284. In addition, blood and urine tests, psychological tests, and neurologic evaluation can rule out organic causes of the delusions, such as amphetamine-induced psychoses and Alzheimer's disease. Endocrine function tests rule out hyperadrenalism, pernicious anemia, and thyroid disorders.

Treatment

Effective treatment of delusional disorders, consisting of a combination of drug therapy and psychotherapy, must correct the behavior and mood disturbances that result from the patient's mistaken beliefs. Treatment may also include mobilizing a support system for the isolated elderly patient.

Drug treatment with antipsychotics is similar to that used in schizophrenic disorders. Antipsychotics appear to work by blocking postsynaptic dopamine receptors. These drugs reduce the incidence of psychotic symptoms, such as hallucinations and delusions, and relieve anxiety and agitation. Other psychiatric drugs, such as antidepressants and anxiolytics, may be prescribed to control associated symptoms.

A patient's history of medication response is the best guide when selecting treatment. The lowest dose should be started initially and increased slowly based on the patient's response. If the symptoms don't improve during a 6-week trial, other classes of antipsychotics may be tried. Haloperidol, fluphenazine decanoate, and fluphenazine enanthate are depot formulations that are implanted I.M. to release the drug gradually over a 30-day period, improving compliance. Usually, however, this type of treatment isn't needed. Pimozide may be particularly effective in delusional disorders.

Clozapine, which differs chemically from other antipsychotic drugs, may be prescribed for severely ill patients who fail to respond to standard treatment. This drug effectively controls a wider range of psychotic symptoms without the usual adverse effects.

However, clozapine can cause drowsiness, sedation, excessive salivation, tachycardia, dizziness, and seizures. Agranulocytosis, a potentially fatal blood disorder characterized by a low white blood cell count and pronounced neutropenia, may also occur. Routine blood monitoring is essential to detect the estimated 1% to 2% of all patients taking clozapine who develop agranulocytosis. If caught in the early stages, this disorder is reversible.

Special considerations

- In dealing with the delusional patient, be direct, straightforward, and dependable. Whenever possible, elicit his feedback. Move slowly and matter-of-factly and respond without anger or defensiveness to his hostile remarks.
- Respect the patient's privacy and space needs. Don't touch him unnecessarily.
- Take steps to reduce social isolation, if the patient allows. Gradually increase social contacts after he has become comfortable with the staff.

- Watch for refusal of medication or food, resulting from the patient's irrational fear of poisoning.

- Monitor the patient carefully for the adverse effects of antipsychotic drugs: drug-induced parkinsonism, acute dystonia, akathisia, tardive dyskinesia, and malignant neuroleptic syndrome.
- If the patient is taking clozapine, stress the importance of returning weekly to the hospital or an outpatient setting to have his blood monitored.
- Involve the patient's family in treatment. Teach them how to recognize an impending relapse, and suggest ways to manage symptoms. These include tension, nervousness, insomnia, decreased concentration ability, and apathy.
- Remember to consider cultural beliefs. For example, some Chinese men believe that their genitals withdraw into the abdomen as a precursor to death.

DIAGNOSING DELUSIONAL DISORDERS

In an individual with suspected delusional disorder, psychiatric examination confirms the diagnosis. The examiner bases the diagnosis on the following criteria set forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- Nonbizarre delusions of at least 1 month's duration are present, involving real-life situations, such as being followed, poisoned, infected, loved at a distance, or deceived by one's spouse or lover.
- The patient's symptoms have never met the criteria known as *characteristic symptoms* of schizophrenia. However, tactile and olfactory hallucinations may be present if they're related to a delusional theme.
- Apart from being affected by the delusion or its ramifications, the patient is neither markedly impaired functionally nor is his behavior obviously odd or bizarre.
- If mood disturbances have occurred concurrently with delusions, their total duration has been brief relative to the duration of the delusional disturbance.

- The disturbance isn't due to the direct physiologic effects of a substance or a general medical condition.

Delusional disorder or paranoid schizophrenia?

To distinguish between these two disorders, consider the following characteristics.

Delusional disorder

In a delusional disorder, the patient's delusions reflect reality and are arranged into a coherent system. They're based on misinterpretations of, or elaborations on, reality. The patient doesn't experience hallucinations, and his affect and behavior are normal.

Paranoid schizophrenia

In paranoid schizophrenia, the patient's delusions are scattered, illogical, and incoherently arranged with no direct relation to reality. The patient may have hallucinations, his affect is inappropriate and inconsistent, and his behavior is bizarre.

MOOD DISORDERS

Bipolar disorders

Marked by severe pathologic mood swings from hyperactivity and euphoria to sadness and depression, bipolar disorders involve various symptom combinations. Type I bipolar disorder is characterized by alternating episodes of mania and depression, whereas type II is characterized by recurrent depressive episodes and occasional mild manic (hypomanic) episodes. In some patients, bipolar disorder assumes a seasonal pattern, marked by a cyclic relation between the onset of the mood episode and a particular 60-day period of the year.

Causes and incidence

The cause of bipolar disorder is unclear, but hereditary, biological, and psychological factors may play a part. For example, the incidence of bipolar disorder among relatives of affected patients is higher than in the general population and highest among maternal relatives. The closer the relationship, the greater the susceptibility. Children with one affected parent have a 25% chance of developing bipolar disorder; children with two affected parents, a 50% chance. The incidence of this illness in siblings is 20% to 25%; in identical twins, the incidence is 66% to 96%.

Although certain biochemical changes accompany mood swings, it isn't clear whether these changes cause the mood swings or result from them. In mania and depression, intracellular sodium concentration increases during illness and returns to normal with recovery.

Patients with mood disorders have a defect in the way the brain handles certain neurotransmitters—chemical messengers that shuttle nerve impulses between neurons. Low levels of the chemicals dopamine and norepinephrine, for example, have been linked to depression, whereas excessively high levels of these chemicals are associated with mania.

Changes in the concentration of acetylcholine and serotonin may also play a role. Although neurobiologists have yet to prove that these chemical shifts cause bipolar disorder, it's widely assumed that most antidepressant medications work by modifying these neurotransmitter systems.

New data suggest that changes in the circadian rhythms that control hormone secretion, body temperature, and appetite may contribute to the development of bipolar disorder.

Emotional or physical trauma, such as bereavement, disruption of an important relationship, or a serious accidental injury, may precede the onset of bipolar disorder; however, bipolar disorder commonly appears without identifiable predisposing factors.

Manic episodes may follow a stressful event, but they're also associated with antidepressant therapy and childbirth. Major depressive episodes may be caused by chronic physical illness, psychoactive drug dependence, psychosocial stressors, and childbirth. Other familial influences, especially the early loss of a parent, parental depression,

incest, or abuse, may predispose a person to depressive illness. (See *Cyclothymic disorder,* page 1286.)

The American Psychiatric Association estimates that 0.4% to 1.2% of adults experience bipolar disorder. This disorder affects women and men equally and is more common in higher socioeconomic groups. It can begin any time after adolescence, but onset usually occurs between ages 20 and 35; about 35% of patients experience onset between ages 35 and 60. Before the onset of overt symptoms, many patients with bipolar disorder have an energetic and outgoing personality with a history of wide mood swings.

Bipolar disorder recurs in 80% of patients; as they grow older, the episodes recur more frequently and last longer. This illness is associated with a significant mortality; 20% of patients commit suicide, many just as the depression lifts.

Signs and symptoms

Signs and symptoms vary widely, depending on whether the patient is experiencing a manic or a depressive episode.

During the assessment interview, the *manic* patient typically appears grandiose, euphoric, expansive, or irritable with little control over his activities and responses. He may describe hyperactive or excessive behavior, including elaborate plans for numerous social events, efforts to renew old acquaintances by telephoning friends at all hours of the night, buying sprees, or promiscuous sexual activity. He seldom hesitates to start projects for which he has little aptitude.

The patient's activities may have a bizarre quality, such as dressing in colorful or strange garments, wearing excessive makeup, or giving advice to passing

strangers. He commonly expresses an inflated sense of self-esteem, ranging from uncritical self-confidence to marked grandiosity, which may be delusional.

CYCLOTHYMIC DISORDER

A chronic mood disturbance of at least 2 years' duration, cyclothymic disorder involves numerous episodes of hypomania or depression that aren't of sufficient severity or duration to qualify as a major depressive episode or a bipolar disorder.

Cyclothymia commonly starts in adolescence or early adulthood. Beginning insidiously, this disorder leads to persistent social and occupational dysfunction.

Signs and symptoms

In the hypomanic phase, the patient may experience insomnia; hyperactivity; inflated self-esteem; increased productivity and creativity; overinvolvement in pleasurable activities, including an increased sexual drive; physical restlessness; and rapid speech. Depressive symptoms may include insomnia, feelings of inadequacy, decreased productivity, social withdrawal, loss of libido, loss of interest in pleasurable activities, lethargy, slow speech, and crying.

Diagnosis

Many medical disorders (for example, endocrinopathies, such as Cushing's syndrome, stroke, brain tumors, and head trauma) and drug overdose can produce a similar pattern of mood alteration. These organic causes must be ruled out before making a diagnosis of cyclothymic disorder.

Note the patient's speech patterns and concentration level. Accelerated and pressured speech, frequent changes of topic, and flight of ideas are common features of the manic phase. The patient is easily distracted and responds rapidly to external stimuli, such as background noise or a ringing telephone.

Physical examination of the manic patient may reveal signs of malnutrition and poor personal hygiene. He may report sleeping and eating less as well as being more physically active than usual.

Hypomania, more common than acute mania, can be recognized during the assessment interview by three classic symptoms: euphoric but unstable mood, pressured speech, and increased motor activity. The hypomanic patient may appear elated, hyperactive, easily distracted, talkative, irritable, impatient, impulsive, and full of energy but seldom exhibits flight of ideas. Delusions and other symptoms of psychotic intensity are never present.

The patient who experiences a *depressive episode* may report a loss of self-esteem, overwhelming inertia, social withdrawal, and feelings of hopelessness, apathy, or self-reproach. He may believe that he's wicked and deserves to be punished. His growing sadness, guilt, negativity, and fatigue place extraordinary burdens on his family.

During the assessment interview, the depressed patient may speak and respond slowly. He may complain of difficulty concentrating or thinking clearly but is usually not obviously disoriented or intellectually impaired.

Physical examination may reveal reduced psychomotor activity, lethargy, low muscle tonus, weight loss, slowed gait, and constipation. The patient may also report sleep disturbances (falling asleep, staying asleep, or early morning awakening), sexual dysfunction, headaches, chest pains, and a heaviness in the limbs. Typically, symptoms are worse in the morning and gradually subside as the day goes on.

His concerns about his health may become hypochondriacal: He may worry excessively about having cancer or some other serious illness. In an elderly patient, physical symptoms may be the only clues to depression.

Suicide is an ever-present risk, especially as the depression begins to lift. At that point, a rising energy level may strengthen

the patient's resolve to carry out suicidal plans.

The suicidal patient may also harbor homicidal ideas—for example, thinking of killing his family either in anger or to spare them pain and disgrace.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing bipolar disorders,* pages 1288 and 1289. Physical examination and laboratory tests, such as endocrine function studies, rule out medical causes of the mood disturbances, including intra-abdominal neoplasm, hypothyroidism, hyperthyroidism, heart failure, cerebral arteriosclerosis, parkinsonism, psychoactive drug abuse, brain tumor, and uremia. Moreover, a review of the medications prescribed for other disorders may point to drug-induced depression or mania.

Treatment

Widely used to treat bipolar disorders, lithium (Eskalith) has proved to be highly effective in relieving and preventing manic episodes. It curbs the accelerated thought processes and hyperactive behavior without producing the sedating effect of antipsychotic drugs. In addition, it may prevent the recurrence of depressive episodes; however, it's ineffective in treating acute depression.

Because lithium has a narrow therapeutic range, treatment must be started cautiously and the dosage must be adjusted slowly. Therapeutic blood levels during the active manic period are 0.4 to 1.4 mEq/L. For safety, the level should never exceed 1.5 mEq/L. Therapeutic blood levels must be maintained for 7 to 10 days before the drug's beneficial effects appear; for this reason, antipsychotic drugs commonly are used in the interim to provide sedation and symptomatic relief. Because lithium is excreted by the kidneys, any renal impairment necessitates withdrawal of the drug. Long-term use of lithium may affect thyroid function.

Anticonvulsants, such as carbamazepine (Tegretol), valproic acid (Depakene), and clonazepam (Klonopin), are used either alone or with lithium to treat mood disorders. Carbamazepine and divalproex (Depakote) are effective in many patients who are lithium-resistant. Other anticonvulsant drugs have also been used. Electroconvulsive therapy is also effective.

Antidepressants are used to treat depressive symptoms, but they may trigger a manic episode.

Quetiapine fumarate (Seroquel) is a new drug that's been used to treat both the manic and depressive phases of bipolar disorder. It may also be used with lithium or divalproex for acute manic episodes.

Special considerations

For the *manic patient:*

- Remember the manic patient's physical needs. Encourage him to eat. Alter the diet so that it's high in calories, carbohydrates, and liquids.
- As the patient's symptoms subside, encourage him to assume responsibility for personal care.
- Provide emotional support, maintain a calm environment, and set realistic goals for behavior.
- Provide diversionary activities suited to a short attention span; firmly discourage the patient if he tries to overextend himself. Provide structured activities involving large motor movements to expend surplus energy. Reduce or eliminate group activities during acute manic episodes.
- When necessary, reorient the patient to reality. Tactfully divert conversations when they become intimately concerned with other patients or staff members.
- Set limits in a calm, clear, and self-confident manner for the manic patient's demanding, hyperactive, manipulative, and acting-out behaviors. Setting limits tells the patient that you'll provide security and protection by refusing inappropriate and possibly harmful requests. Avoid leaving an opening for the patient to test you or argue with you.
- Listen to requests attentively and with a neutral attitude. Avoid power struggles if a patient tries to put you on the spot for an immediate answer. Explain that you'll seriously consider the request and will respond later.

- Encourage solitary activities such as writing out one's thoughts.

- Collaborate with other staff members to provide consistent responses to the patient's manipulative or acting-out behaviors.
- Watch for early signs of frustration (when the patient's anger escalates from verbal threats to hitting an object). Tell the patient firmly that threats and hitting are unacceptable. Explain that these behaviors show that he needs help to control his behavior. Inform him that the staff will help him move to a quiet area to help him control his behavior so he won't hurt himself or others. Staff members who have practiced as a team can work effectively to prevent acting-out behavior or to remove and confine a patient.
- Alert the staff promptly when acting-out behavior escalates. It's safer to have help available before you need it than to try controlling an anxious or frightened patient by yourself.
- After the incident is over and the patient is calm and in control, discuss his feelings with him and offer suggestions on how to prevent a recurrence.
- If the patient is taking lithium, tell him and his family to immediately notify the physician if signs or symptoms of toxicity, such as diarrhea, abdominal cramps, vomiting, unsteadiness, drowsiness, muscle weakness, polyuria, and tremors, occur.

DIAGNOSING BIPOLAR DISORDERS

The diagnosis of a bipolar disorder is confirmed when the patient meets the criteria documented in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

For a manic episode

- A distinct period of abnormally and persistently elevated, expansive, or irritable mood lasting at least 1 week (or any duration if hospitalization is needed).
- During the mood disturbance period, at least three of the following symptoms must have persisted (four, if the mood is only irritable) and have been present to a significant degree:

– inflated self-esteem or grandiosity

– decreased need for sleep

– more talkative than usual or pressured to keep talking

– flight of ideas or subjective experience that thoughts are racing

– distractibility

– increased goal-directed activity or psychomotor agitation

– excessive involvement in pleasurable activities that have a high potential for painful consequences.

- The symptoms don't meet the criteria for a mixed episode.
- The mood disturbance is sufficiently severe to cause one of the following to occur:

  – marked impairment in occupational functioning or in usual social activities or relationships with others

  – hospitalization to prevent harm to self or others

  – evidence of psychotic features.
- The symptoms aren't due to the direct physiologic effects of a substance or a general medical condition.

For a hypomanic episode

- A distinct period of abnormally and persistently elevated, expansive, or irritable mood lasting at least 4 days that's clearly different from the usual nondepressed mood.
- During the mood disturbance period, at least three of the following symptoms must have persisted (four, if the mood is only irritable) and have been present to a significant degree:

– inflated self-esteem or grandiosity

– decreased need for sleep

– more talkative than usual or pressured to keep talking

– flight of ideas or subjective experience that thoughts are racing

– distractibility

– increased goal-directed activity or psychomotor agitation

– excessive involvement in pleasurable activities that have a high potential for painful consequences.

- The episode is associated with an unequivocal change in functioning that's uncharacteristic of the person when not symptomatic.
- Others can recognize the disturbance in mood and the change in functioning.
- The episode isn't severe enough to markedly impair social or occupational functioning or to necessitate hospitalization to prevent harm to self or others. No psychotic features are evident.
- The symptoms aren't due to the direct physiologic effects of a substance or a general medical condition.

For a bipolar I single manic episode

- The presence of only one manic episode and no past major depressive episodes.
- The manic episode isn't better accounted for by schizoaffective disorder and isn't superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

For a bipolar I disorder, most recent episode hypomanic

- The person is currently (or was most recently) in a hypomanic episode.
- The person previously had at least one manic episode or mixed episode.

- The mood symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The first two exacerbations of the mood episode (above) aren't better accounted for by schizoaffective disorder and aren't superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

For a bipolar I disorder, most recent episode manic

- The person is currently (or was most recently) in a manic episode.
- The person previously had at least one major depressive episode, manic episode, or mixed episode.
- The first two exacerbations of mood episode (above) aren't better accounted for by schizoaffective disorder and aren't superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

For a bipolar I disorder, most recent episode mixed

- The person is currently (or was most recently) in a mixed episode.
- The person previously had at least one major depressive episode, manic episode, or mixed episode.
- The first two exacerbations of mood episode (above) aren't better accounted for by schizoaffective disorder and aren't superimposed on schizophrenia,

schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

For a bipolar I disorder, most recent episode depressed

- The person is currently (or was most recently) in a major depressive episode.
- The person previously had at least one manic episode or mixed episode.
- The first two exacerbations of mood episode (above) aren't better accounted for by schizoaffective disorder and aren't superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.

For a bipolar I disorder, most recent episode unspecified

- Criteria, except for duration, are currently (or most recently) met for a manic, hypomanic, mixed, or major depressive episode.
- The person previously had at least one manic episode or mixed episode.
- The mood symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The first two exacerbations of mood episode (above) aren't better accounted for by schizoaffective disorder and aren't superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.
- The first two exacerbations of mood episode (above) aren't due to the direct physiologic effects of a substance or a general medical condition.

For a bipolar II disorder

- The presence (or history) of one or more major depressive episodes.
- The presence (or history) of at least one hypomanic episode.
- The patient has never had a manic episode or a mixed episode.
- The first two exacerbations of mood episode (above) aren't better accounted for by schizoaffective disorder and aren't superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.
- The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

For the *depressed patient:*

- The depressed patient needs ongoing positive reinforcement to improve his self-esteem. Provide a structured routine, including activities to boost his self-confidence and promote interaction with others (for instance, group therapy). Keep reassuring him that his depression will lift.
- Encourage the patient to talk or to write down his feelings if he's having trouble expressing them. Listen attentively and respectfully; allow him time to formulate his thoughts if he seems sluggish. Record your observations and conversations.
- To prevent possible self-injury or suicide, remove harmful objects (such as glass, belts, rope, or bobby pins) from the patient's environment, observe him closely, and strictly supervise his medications. Institute suicide precautions as dictated by facility policy.

- Don't forget the patient's physical needs. If he's too depressed to take care of himself, help him with personal hygiene measures. Encourage him to eat, or feed him if necessary. If he's constipated, add high-fiber foods to his diet; offer small, frequent meals; and encourage physical activity. Recommend good sleep hygiene measures to improve sleep.
- If the patient is taking an antidepressant, watch for signs of mania.

Major depression

Also known as *unipolar disorder,* major depression is a syndrome of persistently sad, dysphoric mood, accompanied by disturbances in sleep and appetite, lethargy, and an inability to experience pleasure (anhedonia).

About half of all depressed patients experience a single episode and recover completely; the rest have at least one recurrence. Major depression can profoundly alter social, family, and occupational functioning. However, suicide is the most serious consequence of major depression—feelings of worthlessness, guilt, and hopelessness are so overwhelming that patients no longer consider life worth living. Nearly twice as many women as men attempt suicide, but men are far more likely to succeed.

Causes and incidence

The multiple causes of depression aren't completely understood. Current research suggests possible genetic, familial, biochemical, physical, psychological, and social causes. Psychological causes (the focus of many nursing interventions) may include feelings of helplessness and vulnerability, anger, hopelessness and pessimism, and low self-esteem. They may be related to abnormal character and behavior patterns and troubled personal relationships. In many cases, the history identifies a specific personal loss or severe stressor that probably interacts with the person's predisposition to provoke major depression.

Depression may be secondary to a specific medical condition—for example, metabolic disturbances, such as hypoxia and hypercalcemia; endocrine disorders, such as diabetes and Cushing's syndrome;

neurologic diseases, such as Parkinson's and Alzheimer's diseases; cancer (especially of the pancreas); viral and bacterial infections, such as influenza and pneumonia; cardiovascular disorders, such as heart failure; pulmonary disorders, such as chronic obstructive lung disease; musculoskeletal disorders, such as degenerative arthritis; GI disorders, such as irritable bowel syndrome; genitourinary problems, such as incontinence; collagen vascular diseases, such as lupus; and anemias.

Drugs prescribed for medical and psychiatric conditions as well as many commonly abused substances can also cause depression. Examples include antihypertensives, psychotropics, opioid and nonopioid analgesics, antiparkinsonian drugs, numerous cardiovascular medications, oral antidiabetics, antimicrobials, steroids, chemotherapeutic agents, cimetidine, and alcohol. Depression occurs in up to 18 million Americans, affecting all racial, ethnic, and socioeconomic groups. It affects both sexes, but is more common in women.

Signs and symptoms

The primary features of major depression are a predominantly sad mood and a loss of interest or pleasure in daily activities. The patient may complain of feeling “down in the dumps,” express doubts about his self-worth or ability to cope, or simply appear unhappy and apathetic. He may also report feeling angry or anxious. Symptoms tend to be more severe than those caused by dysthymic disorder, which is a milder, chronic form of depression. (See *Dysthymic disorder.*) Other common signs include difficulty concentrating or thinking clearly, distractibility, and indecisiveness. In some patients, physiologic and psychologic processes are slowed. Anergia and fatigue are common as are anhedonia (inability to experience pleasure) and insomnia. Other patients may show signs of agitated depression with irritability and anxiety. Note if the patient reveals suicidal thoughts, a preoccupation with death, or has made previous suicide attempts.

DYSTHYMIC DISORDER

Dysthymic disorder is characterized by a chronic dysphoric mood (irritable mood in children), persisting at

least 2 years in adults and 1 year in children and adolescents.

Signs and symptoms

During periods of depression, the patient may also experience poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or difficulty making decisions, and feelings of hopelessness.

Diagnosis

Dysthymic disorder is confirmed when the patient exhibits at least two of the signs or symptoms listed above nearly every day, with intervening normal moods lasting no more than 2 months during a 2-year period.

The disorder typically begins in childhood, adolescence, or early adulthood and causes only mild social or occupational impairment. In adults, it's more common in women; in children and adolescents, it's equally common in both sexes.

The psychosocial history may reveal life problems or losses that can account for the depression. Or, the patient's medical history may implicate a physical disorder or the use of prescription, nonprescription, or illegal drugs that can cause depression. Note that many of the characteristics of depression, such as changes in eating and sleeping patterns, fatigue, and problems with concentration may also occur in chronic medical conditions.

The patient may report an increase or a decrease in appetite, sleep disturbances (for example, insomnia or early awakening), a lack of interest in sexual activity, constipation, or diarrhea. Other signs that you may

note during a physical examination include agitation (such as hand wringing or restlessness) and reduced psychomotor activity (for example, slowed speech).

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing major depression*.

The diagnosis is supported by psychological tests, such as the Beck Depression Inventory, which may help determine the onset, severity, duration, and progression of depressive symptoms. A toxicology screening may suggest drug-induced depression.

Treatment

Depression is difficult to treat, especially in children, adolescents, elderly patients, and those with a history of chronic disease. The primary treatment methods are drug therapy and psychotherapy, particularly cognitive behavioral therapy.

Drug therapy includes tricyclic antidepressants (TCAs) such as amitriptyline, monoamine oxidase (MAO) inhibitors such as isocarboxazid (Marplan), maprotiline, and trazodone, which has been available for 40 years. A newer class of drugs, the selective serotonin reuptake inhibitors (SSRIs), such as fluoxetine (Prozac), paroxetine (Paxil), sertraline, bupropion (Zyban), venlafaxine (Effexor), and mirtazapine (Remeron), are equally effective and have more tolerable adverse effect profiles.

Other drugs target serotonin as well as dopamine (bupropion) and norepinephrine (velafaxine and duloxetine [Cymbalta]). These varied psychopharmacological drugs allow for increased specificity of action. So, for example, a patient who shows neurovegetative signs of depression may benefit from bupropion, while another patient who's experiencing co-occurring anxiety and depression may benefit more from venlafaxine.

TCAs, the oldest class of antidepressants, prevent the reuptake of norepinephrine or serotonin (or both) into the presynaptic nerve endings, resulting in increased synaptic concentrations of these neurotransmitters. While often effective, these drugs have significant side effects. Because of their effect on cardiac conduction, TCAs may be lethal in overdoses. They also cause a gradual loss in the number of beta-adrenergic receptors.

MAO inhibitors block the enzymatic degradation of norepinephrine and serotonin. These drugs commonly are prescribed for patients with atypical depression (for example, depression marked by an increased appetite and need for sleep, rather than anorexia and insomnia) and for some patients who fail to respond to other classes of antidepressant drugs. MAO inhibitors are associated with a high risk of toxicity; patients treated with one of these drugs must be able to comply with the necessary dietary restrictions.

Maprotiline is a potent blocker of norepinephrine uptake, whereas trazodone is an SSRI. The mechanism of action of bupropion is unknown.

Electroconvulsive therapy (ECT) may be considered in particularly severe or drugresistant depression. Six to 12 treatments are typically needed, although in many cases improvement is evident after only a few treatments. However, ECT has been associated with later short-term memory loss, heart arrhythmias, and seizure activity. Researchers hypothesize that ECT affects the same receptor sites as antidepressants.

Short-term psychotherapy is also effective in treating major depression. Many psychiatrists believe that the best results are achieved with a combination of individual, family, or group psychotherapy and medication. After resolution of the acute episode, patients with a history of recurrent depression may be maintained on low doses of antidepressants as a preventive measure.

Depression may be experienced differently by members of different cultures. For instance, in some Asian cultures, there are more somatic manifestations of depression than overt psychologic signs or symptoms.

Newer treatments for depression are being studied, including transcranial magnetic stimulation, which causes an intense magnetic field designed to depolarize neurons. Vagus nerve stimulation, a treatment already approved for epilepsy, involves a mild electrical impulse applied to the left vagus nerve. It's believed that these electrical

impulses affect neurotransmission, and may be helpful in treating depression.

DIAGNOSING MAJOR DEPRESSION

A patient is diagnosed with major depression when he fulfills the following criteria for a single major depressive episode put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- At least five of the following symptoms must have been present during the same 2-week period and must represent a change from previous functioning; one of these must be either depressed mood or loss of interest in previously pleasurable activities:
  - depressed mood (irritable mood in children and adolescents) most of the day, nearly every day, as indicated by either subjective account or observation by others
  - markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day
  - significant weight loss or weight gain when not dieting or decrease or increase in appetite nearly every day (in children, consider failure to make expected weight gains)
  - insomnia or hypersomnia nearly every day
  - psychomotor agitation or retardation nearly every day
  - fatigue or loss of energy nearly every day
  - feelings of worthlessness or excessive or inappropriate guilt nearly every day
  - diminished ability to think or concentrate, or indecisiveness, nearly every day
  - recurrent thoughts of death, recurrent suicidal ideation without a specific plan, a suicide attempt, or a specific plan for committing suicide.
- The symptoms don't meet criteria for a mixed episode.

- The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The symptoms aren't due to the direct physiologic effects of a substance or a general medical condition.
- The symptoms aren't better accounted for by bereavement, the symptoms persist for longer than 2 months, or the symptoms are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

Special considerations

- Share your observations of the patient's behavior with him. For instance, you might say, “You're sitting all by yourself, looking very sad. Is that how you feel?” Because the patient may think and react sluggishly, speak slowly and allow ample time for him to respond. Avoid feigned cheerfulness. However, don't hesitate to laugh with the patient and point out the value of humor.
- Show the patient he's important by listening attentively and respectfully, preventing interruptions, and avoiding judgmental responses.
- Provide a structured routine, including noncompetitive activities, to build the patient's self-confidence and encourage interaction with others. Urge him to join group activities and to socialize.
- Inform the patient that he can help ease depression by expressing his feelings, participating in pleasurable activities, and improving grooming and hygiene.
- Ask the patient if he thinks of death or suicide. Such thoughts signal an immediate need for consultation and assessment. The risk of suicide increases as the depression lifts, typically in the early stages of treatment with antidepressants. The FDA has issued “black box” warnings on antidepressants

because of this increased risk. (See *Suicide prevention guidelines.*)

SUICIDE PREVENTION GUIDELINES

When the patient is diagnosed with major depression, keep in mind these guidelines.

Assess for clues to suicide

Watch for the patient's suicidal thoughts, threats, and messages; describing a suicide plan; hoarding medication; talking about death and feelings of futility; giving away prized possessions; and changing behavior, especially as depression begins to lift.

Provide a safe environment

Check patient areas and correct dangerous conditions, such as exposed pipes, windows without safety glass, and access to the roof or balconies.

Remove dangerous objects

Take away potentially dangerous objects, such as belts, razors, suspenders, light cords, glass, knives, nail files and clippers, and metal and hard plastic objects.

Consult with staff

Recognize and document verbal and nonverbal suicidal behaviors, keep the physician informed, share data with all staff members, clarify the patient's specific restrictions, assess risk and plan for observation, and clarify day and night staff responsibilities and the frequency of consultations.

Observe the suicidal patient

Be alert when the patient is using a sharp object (such as a razor), taking medication, or using the bathroom (to prevent hanging or other injury). Assign the patient to a

room near the nurses' station and with another patient. Continuously observe the acutely suicidal patient.

Maintain personal contact

Help the suicidal patient feel that he isn't alone or without resources or hope. Encourage continuity of care and consistency of primary nurses. Building emotional ties to others is the ultimate technique for preventing suicide.

ELDER TIP

The older adult at highest risk for suicide is at least age 85, is depressed, has high self-esteem, and needs to control his own life. Even a frail nursing home resident with these characteristics may have the strength to kill himself.

- To prevent possible drug interactions, tell the patient to inform his health care provider if he's taking antidepressants.
- While tending to the patient's psychological needs, don't forget his physical needs. If he's too depressed to take care of himself, help him with personal hygiene. Encourage him to eat, or feed him if necessary. If he's constipated, add high-fiber foods to his diet; offer small, frequent meals; and encourage physical activity and fluid intake. Offer warm milk or back rubs at bedtime to improve sleep.
- Inform the patient that antidepressants may take several weeks to produce an effect.
- Teach the patient about depression. Emphasize that effective methods are available to relieve his symptoms. Help him to recognize distorted perceptions that may contribute to his depression. After the patient learns to recognize depressive thought patterns, he can consciously begin to substitute self-affirming thoughts.
- Instruct the patient about prescribed medications. Stress the need for compliance and review adverse effects. For drugs that produce strong anticholinergic effects, such as amitriptyline and amoxapine, suggest

sugarless gum or hard candy to relieve dry mouth. Many antidepressants are sedating

(for example, amitriptyline and trazodone); warn the patient to avoid activities that require alertness, including driving and operating mechanical equipment until the central nervous system (CNS) effects of the drug are known.

- Caution the patient taking a TCA to avoid drinking alcoholic beverages or taking other CNS depressants during therapy.
- If the patient is taking an MAO inhibitor, emphasize that he must avoid foods that contain tyramine, caffeine, or tryptophan. The ingestion of tyramine can cause a hypertensive crisis. Examples of foods that contain these substances include cheese, sour cream, pickled herring, liver, canned figs, raisins, bananas, avocados, chocolate, soy sauce, fava beans, yeast extracts, meat tenderizers, coffee, cola drinks, and beer, Chianti, or sherry.
- Because alcohol acts as a CNS depressant, recommend avoiding alcohol to a patient who's experiencing depression.
- When assessing a patient, ask about herbal remedies that he may be using for depression. A common herbal remedy, St. John's wort, can interact with many other antidepressants.

ANXIETY DISORDERS

Phobias

Defined as a persistent and irrational fear of a specific object, activity, or situation, a phobia results in a compelling desire to avoid the perceived hazard. The patient recognizes that his fear is out of proportion to any actual danger, but he can't control it or explain it away. Three types of phobias exist: agoraphobia, the fear of being alone or of open space; social, the fear of embarrassing oneself in public; and specific, the fear of a single, specific object, such as animals or heights.

A social phobia typically begins in late childhood or early adolescence; a specific phobia usually begins in childhood. Most phobic patients have no

family history of psychiatric illness, including phobias.

Agoraphobia and social phobia tend to be chronic, but new treatments are improving the prognosis. A specific phobia usually resolves spontaneously as the child matures.

Causes and incidence

A phobia develops when anxiety about an object or a situation compels the patient to avoid it. The precise cause of most phobias is unknown. Psychoanalytic theory holds that the phobia is actually repression and displacement of an internal conflict. Behavior theorists view phobia as a stimulusresponse reflex, avoiding a situation or object that causes anxiety.

Ten percent of Americans suffer from a phobic disorder. In fact, phobias are the most common psychiatric disorders in women and the second most common in men. More men than women experience social phobias, whereas agoraphobia and specific phobias are more common in women.

Signs and symptoms

The phobic patient typically reports signs of severe anxiety when confronted with the feared object or situation. A patient with agoraphobia, for example, may complain of dizziness, a sensation of falling, a feeling of unreality (depersonalization), vomiting, or cardiac distress when he leaves home or crosses a bridge. Similarly, a patient who fears flying may report that he begins to sweat, his heart pounds, and he feels panicky and short of breath when he's on an airplane.

A patient who routinely avoids the object of his phobia may report a loss of self-esteem and feelings of weakness, cowardice, or ineffectiveness. Avoidance behavior reinforces the fear related to a phobia. If he hasn't mastered the phobia, he may also exhibit signs of mild depression.

Diagnosis

For characteristic findings in this condition, see *Diagnosing phobias,* pages 1296 and 1297.

Treatment

The effectiveness of treatment depends on the severity of the patient's phobia. Because phobic behavior may never be completely cured, the goal of treatment is to help the patient function effectively.

DIAGNOSING PHOBIAS

Phobias are classified as agoraphobia, social phobias, and specific phobias. The diagnosis of all three is based on criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Agoraphobia

Fear of being in places or situations from which escape might be difficult or embarrassing or in which help might be unavailable if an unexpected or situationally predisposed panic attack or paniclike symptom occurs. Agoraphobic fears typically involve characteristic clusters of situations that include being outside the home alone, being in a crowd or standing in a line, being on a bridge, and traveling in a bus, train, or automobile.

- The situations are avoided or endured with marked distress or with anxiety about having a panic attack or paniclike symptoms, or the person requires the presence of a companion.
- The anxiety or phobic avoidance isn't better accounted for by mental disorder, such as social phobia, specific phobia, obsessive-compulsive disorder, posttraumatic stress disorder, or separation anxiety disorder.

Social phobia

A persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or possible scrutiny by others. The person fears that he may act in a way that will be humiliating or embarrassing.

- Exposure to the feared social situation almost invariably provokes anxiety, which may take the form of a situationally bound or situationally predisposed panic attack.
- The person recognizes that the fear is excessive or unreasonable.
- The feared social or performance situations are avoided or endured with intense anxiety or distress.
- The avoidance, anxious anticipation, or distress in the feared social or performance situation interferes with the person's normal routine, occupational functioning, or social activities or relationships. There may be marked distress about having the phobia.
- In individuals younger than age 18, the duration is at least 6 months.
- The fear or avoidance isn't due to the direct physiologic effects of a substance or a general medical condition and isn't better accounted for by another mental disorder.
- If the person has a general medical condition or another mental disorder, the person's social fear is unrelated to the medical or mental condition.

Specific phobia

Marked and persistent fear that's excessive or unreasonable and cued by the presence or anticipation of a specific object or situation.

- Exposure to the phobic stimulus almost invariably provokes an immediate anxiety response, which may take the form of a situationally bound or situationally predisposed panic attack.
- The person recognizes that the fear is excessive or unreasonable.

- The person avoids the situation or endures it with intense anxiety or distress.
- The avoidance, anxious anticipation, or distress in the feared situation significantly interferes with the person's normal routine, occupational functioning, or social activities or relationships. There may be marked distress about having the phobia.
- In individuals younger than age 18, the duration is at least 6 months.
- The anxiety, panic attacks, or phobic avoidance associated with the specific object or situation isn't better accounted for by another mental disorder, such as obsessive-compulsive disorder, posttraumatic stress disorder, separation anxiety disorder, social phobia, panic disorder with agoraphobia, or agoraphobia without a history of panic disorder.

Anxiolytics, tricyclic antidepressants, monoamine oxidase inhibitors, and selective serotonin reuptake inhibitors may help relieve symptoms in patients with agoraphobia or social phobias. Gabapentin (Neurontin) has been used to treat social phobia. Performance anxiety may be lessened by beta-adrenergic blockers, such as propranol (Inderal), used 1 to 2 hours before the performance.

Systematic desensitization, a type of behavioral therapy, may be more effective than drugs, especially if it includes encouragement, instruction, and suggestion.

In some cities, phobia clinics and group therapy are available. People who have recovered from phobias can usually help other phobic patients.

Special considerations

- Provide for the patient's safety and comfort, and monitor fluid and food intake, as needed. Certain phobias may inhibit food

or fluid intake, disturb hygiene, and disrupt the patient's ability to rest.

- No matter how illogical the patient's phobia seems, avoid the urge to trivialize his fears. Remember that this behavior represents an essential coping mechanism.
- Ask the patient how he normally copes with the fear. When he's able to face the fear, encourage him to verbalize and explore his personal strengths and resources with you.
- Don't let the patient withdraw completely. If an agoraphobic patient is being treated as an outpatient, suggest small steps to overcome his fears such as planning a brief shopping trip with a supportive family member or friend.
- In social phobias, the patient fears criticism. Encourage him to interact with others and provide continuous support and positive reinforcement.
- Support participation in psychotherapy, including desensitization therapy. However, don't force insight. Challenging the patient may aggravate his anxiety or lead to panic attacks.
- Teach the patient specific relaxation techniques, such as listening to music and meditating.
- Suggest ways to channel the patient's energy and relieve stress (such as running and creative activities).

Generalized anxiety disorder

Anxiety is a feeling of apprehension that some describe as an exaggerated feeling of impending doom, dread, or uneasiness. Unlike fear—a reaction to danger from a specific external source—anxiety is a reaction to an internal threat, such as an unacceptable impulse or a repressed thought that's straining to reach a conscious level.

A rational response to a real threat, occasional anxiety is a normal part of life. Overwhelming anxiety, however, can result in generalized anxiety disorder—uncontrollable, unreasonable worry that persists for at least 6

months and narrows perceptions or interferes with normal functioning. Recent evidence indicates that the prevalence of generalized anxiety disorder is greater than previously thought and may be even greater than that of depression.

Causes and incidence

Theorists share a common premise: Conflict, whether intrapsychic, sociopersonal, or interpersonal, promotes an anxiety state.

Generalized anxiety disorder has a 1-year prevalence range from 3% to 8%. It's more common in women than in men, and half of all cases begin in childhood or adolescence.

DIAGNOSING GENERALIZED ANXIETY DISORDER

When the patient's symptoms match criteria documented in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, the diagnosis of generalized anxiety disorder is confirmed. The criteria include:

- Excessive anxiety and worry about numerous events or activities occur more days than not for at least 6 months.
- The person finds it difficult to control the worry.
- The anxiety and worry are associated with at least three of the following six symptoms:
  - restlessness or feeling keyed up or on edge
  - being easily fatigued
  - difficulty concentrating or mind going blank
  - irritability
  - muscle tension
  - sleep disturbances (difficulty falling or staying asleep, or restless, unsatisfying sleep).

- The focus of the anxiety and worry isn't confined to features of an axis I disorder.
- The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The disturbance isn't due to the direct physiologic effects of a substance or a general medical condition and doesn't occur exclusively during a mood disorder, a psychotic disorder, or a pervasive developmental disorder.

Signs and symptoms

Generalized anxiety disorder can begin at any age but typically has an onset in the 20s and 30s. Psychological or physiologic symptoms of anxiety states vary with the degree of anxiety. Mild anxiety mainly causes psychological symptoms, with unusual self-awareness and alertness to the environment. Moderate anxiety leads to selective inattention but with the ability to concentrate on a single task. Severe anxiety causes an inability to concentrate on more than scattered details of a task. A panic state with acute anxiety causes a complete loss of concentration, typically with unintelligible speech.

Physical examination of the patient with generalized anxiety disorder may reveal signs or symptoms of motor tension, including trembling, muscle aches and spasms, headaches, and an inability to relax. Autonomic signs and symptoms include shortness of breath, tachycardia, sweating, and abdominal complaints.

In addition, the patient may startle easily and complain of feeling apprehensive, fearful, or angry. There may also be difficulty concentrating, eating, and sleeping. The medical, psychiatric, and psychosocial histories fail to identify a specific physical or environmental cause of the anxiety.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing generalized anxiety disorder.*

Laboratory tests must exclude organic causes of the patient's signs and symptoms, such as hyperthyroidism, pheochromocytoma, coronary artery disease, supraventricular tachycardia, and Ménière's disease. For example, an electrocardiogram can rule out myocardial ischemia in a patient who complains of chest pain. Blood tests, including complete blood count, white blood cell count and differential, and serum lactate and calcium levels, can rule out hypocalcemia.

Because anxiety is the central feature of other mental disorders, psychiatric evaluation must rule out phobias, obsessive-compulsive disorder, depression, and acute schizophrenia.

Behaviors commonly associated with a diagnosis of anxiety may have cultural origins or acceptance. For example, Hispanics may experience “susto,” or a state of anxiety, insomnia, anorexia, and social withdrawal, following a frightening stimulus.

Koreans may experience “Hwa-byung”— a state of anxiety and irritability, with various physiologic symptoms, such as headache and palpitations. African Americans may experience “blockout,” involving collapse, dizziness, and reduced physical movement in time of stress.

Treatment

A combination of drug therapy and psychotherapy may help a patient with generalized anxiety disorder. Benzodiazepines may relieve mild anxiety and improve the patient's ability to cope.

ELDER TIP

A benzodiazepine with a long half-life tends to accumulate in an older patient's system and may cause oversedation. Benzodiazepines are sometimes given along with opioids to add to the analgesic effect or as a preanesthetic. Remember, if the elderly psychiatric patient is scheduled for surgery, he may take longer to recover from anesthesia if these combinations are used.

Tricyclic antidepressants or higher doses of short-acting benzodiazepines may relieve severe anxiety and panic attacks. Buspirone (Buspar), an anxiolytic, causes the patient less sedation and poses less risk of physical and psychological dependence than the benzodiazepines. Venlafaxine (Effexor), a serotonin and norepinephrine reuptake inhibitor is FDA-approved for the treatment of generalized anxiety disorder.

Psychotherapy for generalized anxiety disorder has two goals: helping the patient identify and deal with the cause of the anxiety and eliminating environmental factors that precipitate an anxious reaction. In addition, the patient can learn relaxation techniques, such as deep breathing, progressive muscle relaxation, focused relaxation, and visualization.

Special considerations

- Stay with the patient when he's anxious, and encourage him to discuss his feelings. Reduce environmental stimuli and remain calm.
- Administer anxiolytics or antidepressants as prescribed, and evaluate the patient's response. Teach the patient about prescribed medications, including the need for adherence with the medication regimen. Review adverse reactions.
- Teach the patient effective coping strategies and relaxation techniques. Help him identify stressful situations that trigger his anxiety, and provide positive reinforcement when he uses alternative coping strategies.

Panic disorder

Characterized by recurrent episodes of intense apprehension, terror, and impending doom, panic disorder represents anxiety in its most severe form. Initially unpredictable, panic attacks may become associated with specific situations or tasks. The disorder commonly exists concurrently with agoraphobia. Equal numbers of men and women are affected by panic disorder alone, whereas panic disorder with agoraphobia occurs in about twice as many women.

Panic disorder typically has an onset in late adolescence or early adulthood, typically in response to a sudden loss. It may also be

triggered by severe separation anxiety experienced during early childhood. Without treatment, panic disorder can persist for years, with alternating exacerbations and remissions. The patient with panic disorder is at high risk for a psychoactive substance abuse disorder: He may resort to alcohol or anxiolytics in an attempt to relieve his extreme anxiety.

Causes and incidence

Like other anxiety disorders, panic disorder may stem from a combination of physical and psychological factors. For example, some theorists emphasize the role of stressful events or unconscious conflicts that occur early in childhood.

Recent evidence indicates that alterations in brain biochemistry, especially in norepinephrine, serotonin, and gammaaminobutyric acid activity, may also contribute to panic disorder.

Panic disorder affects about 2% of the population. Symptoms usually develop before age 25.

Signs and symptoms

The patient with panic disorder typically complains of repeated episodes of unexpected apprehension, fear or, rarely, intense discomfort. These panic attacks may last for minutes or hours and leave the patient shaken, fearful, and exhausted. They may occur several times a week, sometimes even daily. Because the attacks occur spontaneously, without exposure to a known anxiety-producing situation, the patient generally worries between attacks about when the next episode will occur. This is referred to as anticipatory anxiety.

Physical examination of the patient during a panic attack may reveal signs of intense anxiety, such as hyperventilation, tachycardia, trembling, and profuse sweating. He may also complain of difficulty breathing, digestive disturbances, and chest pain.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing panic disorder.*

Because many medical conditions can mimic panic disorder, additional tests may be ordered to rule out an organic basis for the symptoms. For example, tests for serum glucose levels rule out hypoglycemia; studies of urine catecholamines and vanillylmandelic acid rule out pheochromocytoma; and thyroid function tests rule out hyperthyroidism.

Urine and serum toxicology tests may reveal the presence of psychoactive substances that can cause panic attacks, including barbiturates, caffeine, and amphetamines.

Treatment

Panic disorder may respond to behavioral therapy, supportive psychotherapy, or drug therapy, alone or in combination. Behavioral therapy works best when agoraphobia accompanies panic disorder because the identification of anxiety-inducing situations is easier.

Psychotherapy commonly uses cognitive techniques to enable the patient to view anxiety-provoking situations more realistically and to recognize panic symptoms as a misinterpretation of essentially harmless physical sensations.

Drug therapy includes anxiolytics, such as diazepam, alprazolam, and clonazepam, and beta blockers, such as propranolol, to provide symptomatic relief. Antidepressants, including tricyclic antidepressants, selective serotonin reuptake inhibitors, and monoamine oxidase inhibitors, are also effective.

Special considerations

- Stay with the patient until the attack subsides. If left alone, he may become even more anxious.
- Maintain a calm, serene approach. Statements such as, “I won't let anything here hurt you,” and, “I'll stay with you,” can assure the patient that you're in control of the immediate situation. Avoid giving him insincere expressions of reassurance.

- The patient's perceptual field may be narrowed, and excessive stimuli may cause him to feel overwhelmed. Dim bright lights or raise dim lights as needed.
- If the patient loses control, move him to a smaller, quieter space.
- The patient may be so overwhelmed that he can't follow lengthy or complicated instructions. Speak in short, simple sentences, and slowly give one direction at a time. Avoid giving lengthy explanations and asking too many questions.
- Allow the patient to pace around the room (provided he isn't belligerent) to help expend energy. Show him how to take slow, deep breaths if he's hyperventilating.
- Avoid touching the patient until you've established a rapport. Unless he trusts you, he may be too stimulated or frightened to find touch reassuring.
- Administer medication as prescribed.
- During and after a panic attack, encourage the patient to express his feelings. Discuss his fears and help him identify situations or events that trigger the attacks.
- Teach the patient relaxation techniques, and explain how he can use them to relieve stress or avoid a panic attack.
- Review with the patient any adverse effects of the drugs he'll be taking. Caution him to notify the practitioner before discontinuing the medication because abrupt withdrawal could cause severe symptoms.

- Encourage the patient and his family to use community resources such as the Anxiety Disorders Association of America.

DIAGNOSING PANIC DISORDER

The diagnosis of panic disorder is confirmed when the patient meets the criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Panic attack

A discrete period of intense fear or discomfort in which at least four of the following symptoms develop abruptly and reach a peak within 10 minutes:

- palpitations, pounding heart, or tachycardia
- sweating
- trembling or shaking
- shortness of breath or smothering sensations
- feeling of choking
- chest pain or discomfort
- nausea or abdominal distress
- dizziness or faintness
- depersonalization or derealization
- fear of losing control or going crazy
- fear of dying
- numbness or tingling sensations (paresthesia)
- hot flashes or chills.

Panic disorder without agoraphobia

- The person experiences recurrent unexpected panic attacks and at least one of the attacks has been followed by 1 month (or more) of one (or more) of the following:
  - – persistent concern about having additional attacks
  - – worry about the implications of the attack or its consequences
  - – a significant change in behavior related to the attacks.
- The panic attacks aren't caused by the direct physiologic effects of a substance or a general medical condition.

- The panic attacks aren't better accounted for by another mental disorder, such as social phobia, specific phobia, obsessive-compulsive disorder, posttraumatic stress disorder, or separation anxiety disorder.

Panic disorder with agoraphobia

- The person experiences recurrent unexpected panic attacks and at least one of the attacks has been followed by 1 month (or more) of one (or more) of the following:
  - persistent concern about having additional attacks
  - worry about the implications of the attack or its consequences
  - a significant change in behavior related to the attacks.
- The person exhibits agoraphobia.
- The panic attacks aren't caused by the direct physiologic effects of a substance or a general medical condition.
- The panic attacks aren't better accounted for by another mental disorder, such as social phobia, specific phobia, obsessive-compulsive disorder, posttraumatic stress disorder, or separation anxiety disorder.

Obsessive-compulsive disorder

Obsessive thoughts and compulsive behaviors represent recurring efforts to control overwhelming anxiety, guilt, or unacceptable impulses that persistently enter the consciousness. The word *obsession* refers to a recurrent idea, thought, impulse, or image that's intrusive and inappropriate, causing marked anxiety or distress. A compulsion is a ritualistic, repetitive, and involuntary defensive behavior. Performing a compulsive behavior reduces the patient's anxiety and increases the probability that

the behavior will recur. Compulsions are commonly associated with obsessions.

Patients with obsessive-compulsive disorder (OCD) are prone to abuse psychoactive substances, such as alcohol and anxiolytics, in an attempt to relieve their anxiety. In addition, other anxiety disorders and major depression commonly coexist with OCD.

OCD is typically a chronic condition with remissions and flare-ups. Mild forms of the disorder are relatively common in the population at large.

Causes and incidence

The cause of OCD is unknown. Some studies suggest the possibility of brain lesions, but the most useful research and clinical studies base an explanation on psychological theories. In addition, major depression, organic brain syndrome, and schizophrenia may contribute to the onset of OCD. Some authorities think that OCD is closely related to some eating disorders.

OCD affects 2% to 3% of Americans — about 7 million people. Symptoms usually are noticed between ages 20 and 30, with 75% of patients displaying symptoms before age 30.

Signs and symptoms

The psychiatric history of a patient with OCD may reveal the presence of obsessive thoughts, words, or mental images that persistently and involuntarily invade the consciousness. Some common obsessions include thoughts of violence (such as stabbing, shooting, maiming, or hitting), thoughts of contamination (images of dirt, germs, or feces), repetitive doubts and worries about a tragic event, and repeating or counting images, words, or objects in the environment. The patient recognizes that the obsessions are a product of his own mind and that they interfere with normal daily activities.

The patient's history may also reveal the presence of compulsions, irrational and recurring impulses to repeat a certain behavior. Common compulsions include repetitive touching, sometimes combined with

counting; doing and undoing (for instance, opening and closing doors or rearranging things); washing (especially hands); and checking (to be sure no tragedy has occurred since the last time he checked). In many cases, the patient's anxiety is so strong that he will avoid the situation or the object that evokes the impulse.

When the obsessive-compulsive phenomena are mental, observation may reveal no behavioral abnormalities. However, compulsive acts may be observed. Feelings of shame, nervousness, or embarrassment may prompt the patient to try limiting these acts to his own private time.

Also evaluate the impact of obsessive-compulsive phenomena on the patient's normal routine. He'll typically report moderate to severe impairment of social and occupational functioning.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing obsessive-compulsive disorder.*

Treatment

OCD is tenacious, but improvement occurs in 60% to 70% of patients who obtain treatment. Current treatment usually involves a combination of medication and cognitive behavioral therapy. Other types of psychotherapy may also be helpful.

Effective medications include clomipramine, a tricyclic antidepressant; selective serotonin reuptake inhibitors, such as fluoxetine, paroxetine, sertraline, and fluvoxamine; and the benzodiazepine clonazepam.

Behavioral therapies — aversion therapy, thought stopping, thought switching, flooding, implosion therapy, and response prevention — have also been effective. (See *Behavioral therapies,* page 1304.)

Special considerations

- Approach the patient unhurriedly.
- Provide an accepting atmosphere; don't appear shocked, amused, or critical of the ritualistic behavior.

- Keep the patient's physical health in mind. For example, compulsive hand washing may cause skin breakdown; rituals or preoccupations may cause inadequate food and fluid intake and exhaustion. Provide for basic needs, such as rest, nutrition, and grooming, if the patient becomes involved

in ritualistic thoughts and behaviors to the point of self-neglect.

DIAGNOSING OBSESSIVE-COMPULSIVE DISORDER

The diagnosis of obsessive-compulsive disorder is made when the patient's signs and symptoms meet the established criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Either obsessions or compulsions

Obsessions are defined as all of the following:

- Recurrent and persistent thoughts, impulses, or images perceived to be intrusive and inappropriate by the patient, causing anxiety or distress at some point in time during the disturbance.
- The thoughts, impulses, or images are not simply excessive worries about reallife problems.
- The person attempts to ignore or suppress such thoughts or impulses, or to neutralize them with some other thought or action.
- The person recognizes that the obsessions are the products of his mind and not externally imposed.

Compulsions are defined as all of the following:

- Repetitive behaviors or mental acts performed by the person, who feels driven to perform them in response to an obsession or according to rules that must be applied rigidly.

- The behavior or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation. However, either the activity isn't connected in a realistic way with what it's designed to neutralize or prevent or it's clearly excessive.
- The patient recognizes that his behavior is excessive or unreasonable (this may not be true for young children or for patients whose obsessions have evolved into overvalued ideas).

Additional criteria

- At some point, the person recognizes that the obsessions or compulsions are excessive or unreasonable.
- The obsessions or compulsions cause marked distress, are time-consuming (take more than 1 hour per day), or significantly interfere with the person's normal routine, occupational functioning, or usual social activities or relationships.
- If another axis I disorder is present, the content of the obsession is unrelated to it; for example, the ideas, thoughts, or images aren't about food in the presence of an eating disorder, about drugs in the presence of a psychoactive substance abuse disorder, or about guilt in a major depressive disorder.
- The disturbance isn't due to the direct physiologic effects of a substance or a general medical condition.

- Let the patient know that you're aware of his behavior. For example, you might say, “I noticed you've made your bed three times today; that must be very tiring for you.” Help the patient explore feelings associated with the behavior. For example, ask him, “What do you think about while you're performing your chores?”

- Make reasonable demands and set reasonable limits, explaining their purpose clearly. Avoid creating situations that increase frustration and provoke anger, which may interfere with treatment.
- Explore patterns leading to the behavior or recurring problems.
- Listen attentively, offering feedback.
- Encourage the use of appropriate defenses to relieve loneliness and isolation.
- Engage the patient in activities to create positive accomplishments and raise his self-esteem and confidence.
- Encourage active diversionary activities, such as whistling or humming a tune, to divert attention from the unwanted

  thoughts and to promote a pleasurable experience.

BEHAVIORAL THERAPIES

The following behavioral therapies are used to treat the patient with obsessive-compulsive disorder.

Aversion therapy

Application of a painful stimulus creates an aversion to the obsession that leads to undesirable behavior (compulsion).

Flooding

Flooding is frequent, full-intensity exposure (through the use of imagery) to an object that triggers a symptom. It must be used with caution because it produces extreme discomfort.

Implosion therapy

A form of desensitization, implosion therapy calls for repeated exposure to a highly feared object.

Response prevention

Preventing compulsive behavior by distraction, persuasion, or redirection of activity, response prevention

may require hospitalization or involvement of the patient's family to be effective.

Thought stopping

Thought stopping breaks the habit of fear-inducing anticipatory thoughts. The patient learns to stop unwanted thoughts by saying the word “stop” and then focusing his attention on achieving calmness and muscle relaxation.

Thought switching

To replace fear-inducing selfinstructions with competent selfinstructions, the patient learns to replace negative thoughts with positive ones until the positive thoughts become strong enough to overcome the anxiety-provoking ones.

- Help the patient develop new ways to solve problems and cultivate more effective coping skills by setting limits on unacceptable behavior (for example, by limiting the number of times per day he may indulge in compulsive behavior). Gradually shorten the time allowed for compulsive behavior. Help him focus on other feelings or problems for the remainder of the time.
- Identify insight and improved behavior (reduced compulsive behavior and fewer obsessive thoughts). Evaluate behavioral changes by your own observations and the patient's reports.
- Identify disturbing topics of conversation that reflect underlying anxiety or terror.
- When interventions don't work, reevaluate them and recommend alternative strategies.
- Help the patient identify progress and set realistic expectations of himself and others.
- Explain how to channel emotional energy to relieve stress (for example, through sports and creative endeavors). In addition, teach the patient relaxation and breathing techniques to help reduce anxiety.

- Work with the patient and other treatment team members to establish behavioral goals and to help the patient tolerate anxiety in pursuing these goals.

Posttraumatic stress disorder

Characteristic psychological consequences that persist for at least 1 month after a traumatic event outside the range of usual human experience are classified as posttraumatic stress disorder (PTSD). This disorder can follow almost any distressing event, including a natural or man-made disaster, physical or sexual abuse, or an assault or a rape. Psychological trauma, which accompanies the physical trauma, is characterized by intense fear and feelings of helplessness and loss of control. PTSD can be acute, chronic, or delayed. When the precipitating event is of human design, the disorder is more severe and more persistent.

Onset can occur at any age, even during childhood.

Causes and incidence

PTSD occurs in response to an extremely distressing event, including a serious threat of harm to the patient or his family, such as war, abuse, or violent crime. It may be triggered by sudden destruction of his home or community by a bombing, fire, flood, tornado, earthquake, or similar disaster. It may also follow witnessing the death or serious injury of another person by torture, in a death camp, by natural disaster, or by a motor vehicle or airplane crash.

Preexisting psychopathology can predispose some patients to this disorder, but anyone can develop it, especially if the stressor is extreme.

Any person who has experienced traumatic relocation due to such events as rioting or other civil strife, extreme natural disasters, or war should be assessed for signs of PTSD.

PTSD can occur at any age. Most cases resolve 3 months after the traumatic event, but some cases can last for years.

Signs and symptoms

The psychosocial history of a patient with PTSD may reveal early life experiences, interpersonal factors, military experiences, or other incidents that suggest the precipitating event. Typically, the patient may report that his symptoms began immediately or soon after the trauma, although they may not develop until months or years later. In such a case, avoidance symptoms usually have been present during the latency period.

Symptoms include pangs of painful emotion and unwelcome thoughts; intrusive memories; dissociative episodes (flashbacks); a traumatic reexperiencing of the event; difficulty falling or staying asleep, frequent nightmares of the traumatic event, and aggressive outbursts on awakening; emotional numbing (diminished or constricted response); and chronic anxiety or panic attacks (with physical signs and symptoms).

The patient may display rage and survivor guilt, use of violence to solve problems, depression and suicidal thoughts, phobic avoidance of situations that arouse memories of the traumatic event (such as hot weather and tall grasses for the Vietnam veteran), memory impairment or difficulty concentrating, and feelings of detachment or estrangement that destroy interpersonal relationships. Some have physical symptoms, fantasies of retaliation, and substance abuse.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing posttraumatic stress disorder,* page 1306.

Treatment

Treatment of PTSD aims to reduce the target symptoms, prevent chronic disability, and promote occupational and social rehabilitation. Specific treatments may emphasize behavioral techniques (such as relaxation therapy to decrease anxiety and induce sleep or progressive desensitization). Anxiolytics and antidepressant drugs or psychotherapy (supportive, insight, or cathartic) may minimize the risks of dependency and chronicity.

Support groups are highly effective and are provided through many Veterans Administration centers and crisis clinics. These groups provide a forum in which victims of this disorder can work through their feelings with others who have had similar conflicts.

Group settings are appropriate for most degrees of symptoms presented. Some group programs include spouses and families in their treatment process. Rehabilitation programs in physical, social, and occupational settings are also available for victims of chronic PTSD.

Many patients need treatment for depression, alcohol or drug abuse, or medical conditions before psychological healing can take place. Treatment of this disorder may be complex, and the prognosis varies.

Special considerations

- Encourage the patient with PTSD to express his grief, complete the mourning process, and develop coping skills to relieve anxiety and desensitize him to the memories of the traumatic event.

DIAGNOSING POSTTRAUMATIC STRESS DISORDER

The diagnosis of posttraumatic stress disorder is made when the patient's signs and symptoms meet the following criteria documented in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

- The person was exposed to a traumatic event in which both of the following occurred:
  - The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others.
  - The person's response involved intense fear, helplessness, or horror (in children, the response may be expressed by disorganized or agitated behavior).

- The person persistently reexperiences the traumatic event in at least one of the following ways:
  - – recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions
  - – recurrent distressing dreams of the event
  - – acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative episodes that occur even when awakening or intoxicated)
  - – intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
- The person persistently avoids stimuli associated with the traumatic event and experiences numbing of general responsiveness (not present before the traumatic event), as indicated by at least three of the following:
  - – efforts to avoid thoughts or feelings associated with the trauma
  - – efforts to avoid activities, places, or people that arouse recollections of the trauma
  - – inability to recall an important aspect of the traumatic event
  - – markedly diminished interest in significant activities
  - – feeling of detachment or estrangement from other individuals
  - – restricted range of affect such as inability to love others
  - – sense of foreshortened future.
- The person has persistent symptoms of increased arousal (not present before the trauma), as indicated

by at least two of the following:
  - difficulty falling or staying asleep
  - irritability or outbursts of anger
  - difficulty concentrating
  - hypervigilance
  - exaggerated startle response.
- The disturbance must be of at least 1 month's duration.
- The disturbance causes clinically significant distress or impairment in the patient's social, occupational, or other important areas of functioning.

- Keep in mind that such a patient tends to sharply test your commitment and interest. Therefore, first examine your feelings about the event (war or other trauma) so you won't react with disdain and shock. Such reactions hamper the working relationship with the patient and reinforce his typically poor self-image and sense of guilt.
- Know and practice crisis intervention techniques as appropriate in PTSD.
- Establish trust by accepting the patient's current level of functioning and assuming a positive, consistent, honest, and nonjudgmental attitude toward the patient.
- Provide encouragement as the patient shows a commitment to work on his problem.
- Deal constructively with the patient's displays of anger.
- Encourage joint assessment of angry outbursts (identify how anger escalates and

  explore preventive measures that family members can take to regain control).
- Provide a safe, staff-monitored room in which the patient can safely deal with urges to commit physical violence or self-abuse through displacement (such as pounding clay or destroying selected items).

- Encourage the patient to move from physical to verbal expressions of anger.
- Help the patient relieve shame and guilt precipitated by real actions (such as killing or mutilation) that violated a consciously held moral code. Help him put his behavior into perspective, recognize his isolation and self-destructive behavior as forms of atonement, learn to forgive himself, and accept forgiveness from others.
- Refer the patient to a member of the clergy, as appropriate.
- Provide for group therapy with other victims for peer support and forgiveness, or refer the patient to such a support group.
- Refer the patient to appropriate community resources.

SOMATOFORM DISORDERS

Somatization disorder

When multiple recurrent signs and symptoms of several years' duration suggest that physical disorders exist without a verifiable disease or pathophysiologic condition to account for them, somatization disorder is present. The patient with somatization disorder usually undergoes repeated medical examinations and diagnostic testing that — unlike the symptoms themselves — can be potentially dangerous or debilitating. However, unlike the hypochondriac, she isn't preoccupied with the belief that she has a specific disease.

Somatization disorder is usually chronic, with exacerbations occurring during times of stress. The patient's signs and symptoms are involuntary, and she consciously wants to feel better. Nonetheless, she's seldom entirely symptom-free. Signs and symptoms usually begin in adolescence; rarely, in the 20s. This disorder primarily affects women; it's seldom diagnosed in men.

Causes and incidence

Genetic and environmental factors contribute to the development of somatization disorder. It usually develops before age 30 and is more common in females than in males.

Signs and symptoms

Examination of a patient with somatization disorder is characterized by physical complaints presented in a dramatic, vague, or exaggerated way, typically as part of a complicated medical history in which many medical diagnoses have been considered. An important clue to this disorder is a history of multiple medical evaluations by different physicians at different institutions — sometimes simultaneously — without significant findings.

The patient usually appears anxious and depressed. Common physical complaints include:

- conversion or pseudoneurologic signs and symptoms (for example, paralysis or blindness)
- GI discomfort (abdominal pain, nausea, or vomiting)
- female reproductive difficulties (such as painful menstruation) or male reproductive difficulties (such as erectile dysfunction)
- psychosexual problems (for example, sexual indifference)
- chronic pain (for example, back pain)
- cardiopulmonary symptoms (chest pain, dizziness, or palpitations).

The patient typically relates her current complaints and previous evaluations in great detail. She may be quite knowledgeable about tests, procedures, and medical jargon. Attempts to explore areas other than her medical history may cause noticeable anxiety. She tends to disparage previous health care professionals and previous treatments, typically with the comment, “Everyone thinks I'm imagining these things.” In some cases, this may actually be true. (See *Factitious disorders,* page 1308.)

Ongoing assessment should focus on new signs or symptoms or any change in

old ones to avoid missing a developing physical disorder.

FACTITIOUS DISORDERS

Marked by the irrational, repetitious simulation of a physical or mental illness for the purpose of obtaining medical treatment, factitious disorders are serious psychopathologic conditions. The symptoms are intentionally produced and can be either physical or psychological. These disorders are more common in men than in women.

Factitious disorder with physical symptoms

Also called *Munchausen syndrome,* this is the most common factitious disorder. The patient convincingly presents with intentionally feigned symptoms. These symptoms may be fabricated (acute abdominal pain with no underlying disease), self-inflicted (deliberately infecting an open wound), an exacerbation or exaggeration of a preexisting disorder (taking penicillin despite a known allergy), or a combination of all the above.

The history of a patient with Munchausen syndrome may include:

- multiple admissions to various hospitals, typically across a wide geographic area
- extensive knowledge of medical terminology
- pathologic lying
- evidence of previous treatment such as surgery
- shifting complaints and signs and symptoms
- eagerness to undergo hazardous and painful procedures
- discharge against medical advice to avoid detection
- poor interpersonal relationships
- refusal of psychiatric examination
- psychoactive substance or analgesic abuse.

Factitious disorder with psychological symptoms

Causing severely impaired function, this disorder is characterized by intentional feigning of symptoms, suggesting a mental disorder. However, the symptoms represent how the patient views the mental disorder and seldom coincide with any of the diagnostic categories documented in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

This disorder almost always coexists with a severe personality disorder. Most patients have a history of psychoactive substance use, usually in an attempt to elicit the desired symptoms.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing somatization disorder.*

Diagnostic tests rule out physical disorders that cause vague and confusing symptoms, such as hyperparathyroidism, porphyria, multiple sclerosis, chronic fatigue syndrome, and systemic lupus erythematosus. In addition, multiple physical signs and symptoms that appear for the first time late in life are usually due to physical disease rather than somatization disorder.

Treatment

The goal of treatment is to help the patient learn to live with her signs and symptoms. After diagnostic evaluation has ruled out organic causes, the patient should be told that she has no serious illness currently but will receive care for her genuine distress and ongoing medical attention for her symptoms.

The most important aspect of treatment is a continuing supportive relationship with a health care provider who acknowledges the patient's signs and symptoms and is willing to help her live with them. The patient should have regularly scheduled visits that emphasize coping strategies. The patient with somatization

disorder seldom acknowledges any psychological aspect of her illness and rejects psychiatric treatment.

DIAGNOSING SOMATIZATION DISORDER

The diagnosis of somatization disorder is made when the patient's symptoms match the diagnostic criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, as follows:

- A history of many physical complaints, beginning before age 30 and persisting for several years, results in the patient seeking treatment or in the patient experiencing significant social, occupational, or other impairment.
- The patient experiences a selection of symptoms as follows (with individual symptoms occurring at any time during the disturbance):
  - *pain:* a history of pain related to at least *four* different sites or functions (head, abdomen, back, joints, arms and legs, chest, rectum, menstruation, sexual intercourse, or urination)
  - *GI upset:* a history of at least *two* GI symptoms other than pain (vomiting other than during pregnancy, nausea, bloating, diarrhea, and intolerance of different foods)
  - *sexual symptoms:* a history of at least *one* sexual or reproductive symptom other than pain—for example, sexual indifference, erectile or ejaculatory dysfunction, irregular menses, excessive menstrual bleeding, or vomiting throughout pregnancy
  - *pseudoneurologic symptoms:* a history of at least *one* symptom or deficit suggesting a neurologic condition not limited to pain (for example, conversion

symptoms, such as impaired coordination or balance, paralysis or localized weakness, difficulty swallowing or lump in the throat, aphonia, urine retention, hallucinations, loss of touch or pain sensation, double vision, blindness, deafness, or seizures; dissociative symptoms such as amnesia; or loss of consciousness other than fainting).

- A thorough investigation discloses that either the above symptoms can't be fully explained by a known general medical condition or the direct effects of a substance. If a related general medical condition does exist, the physical complaints or resulting impairments exceed what would be expected from the history, physical examination, and diagnostic findings.
- The symptoms aren't intentionally produced or feigned (as in factitious disorder or malingering).

Special considerations

- Acknowledge the patient's symptoms and her efforts to cope despite distress. Don't characterize her symptoms as imaginary. Tell her test results and their significance.
- Emphasize her strengths, for example, “It's good that you can still work with this pain.” Gently point out the time relationship between stress and symptoms.
- Help her manage stress. Typically, her relationships are linked to her symptoms; relieving symptoms may change her interactions with others.
- Negotiate a plan of care with input from the patient and, if possible, her family. Help them to understand the patient's need for troublesome symptoms.

Conversion disorder

A conversion disorder allows a patient to resolve a psychological conflict through the loss of a specific physical function — for example, by paralysis, blindness, or inability to swallow. Unlike factitious disorders or malingering, conversion disorder results in an involuntary loss of physical function.

However, laboratory tests and diagnostic procedures fail to disclose an organic cause. The conversion symptom itself isn't life threatening and usually has a short duration.

DIAGNOSING CONVERSION DISORDER

The diagnosis of conversion disorder is based on the following criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- The person has one or more symptoms or deficits affecting voluntary motor or sensory function that suggest a neurologic or other general medical condition.
- The person exhibits psychological factors judged to be associated with the symptom or deficit because conflicts or other stressors preceded the symptom's or deficit's manifestation.
- The person's symptom or deficit isn't intentionally produced or feigned.
- The person's symptom or deficit can't, after appropriate investigation, be fully explained by a general medical condition, by the direct effects of a substance, or as a culturally sanctioned behavior or experience.
- The person's symptom or deficit warrants medical evaluation, causes clinically significant distress, or impairs social, occupational, or other important areas of functioning.

- The person's symptom or deficit isn't limited to pain or sexual dysfunction, doesn't occur exclusively during the course of somatization disorder, and isn't better accounted for by another mental disorder.

Causes and incidence

The patient suddenly develops the conversion symptom soon after experiencing a traumatic conflict that he believes he can't handle. Two theories may explain why this occurs. According to the first, the patient achieves a “primary gain” when the symptom keeps a psychological conflict out of conscious awareness. For example, a person may experience blindness after witnessing a violent crime. In this case, anxiety relating to witnessing a violent crime is converted into a physical symptom.

The second theory suggests that the patient achieves “secondary gain” from the symptom by avoiding a traumatic activity. For example, a soldier may develop a “paralyzed” hand that prevents him from entering into combat.

Conversion disorder can occur in either sex at any age. An uncommon disorder, it usually begins in adolescence or early adulthood.

Signs and symptoms

The history of a patient with conversion disorder may reveal the sudden onset of a single, debilitating sign or symptom that prevents normal function of the affected body part such as paralysis of a leg. The patient may describe a psychologically stressful event that recently preceded the symptom. Oddly, the patient doesn't display the affect and concern that such a severe symptom usually elicits.

Assessment findings obtained during a physical examination are inconsistent with the primary symptom. For instance, tendon reflexes may be normal in a “paralyzed” part of the body, loss of function fails to follow anatomic patterns of innervation, or pupillary responses and evoked potentials are normal in a patient who complains of blindness.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing conversion disorder.*

A thorough physical evaluation must rule out a physical cause, especially diseases that typically produce vague physical symptoms (such as multiple sclerosis or systemic lupus erythematosus).

Treatment

Psychotherapy, family therapy, relaxation therapy, behavioral therapy, or hypnosis may be used alone or in combination (two or more).

Special considerations

- Help the patient maintain integrity of the affected system. Regularly exercise paralyzed limbs to prevent muscle wasting and contractures.
- Frequently change the bedridden patient's position to prevent pressure ulcers.
- Ensure adequate nutrition, even if the patient is complaining of GI distress.
- Provide a supportive environment, and encourage the patient to discuss the stressful event that provoked his disorder.
- Don't force the patient to talk, but convey a caring attitude to help him share his feelings.
- Don't insist that the patient use the affected system. This will only anger him and prevent the two of you from forming a therapeutic relationship.
- Add your support to the recommendation for psychiatric care.
- Include the patient's family in all care. They may be contributing to the patient's stress, and they're essential to help him regain normal functioning.

Pain disorder

The striking feature of pain disorder is a persistent complaint of pain in the absence of appropriate physical findings. The symptoms are either inconsistent with the normal anatomic distribution of the nervous system or they mimic a disease (such as angina) in the absence of diagnostic validation. Although the pain has no identifiable physical cause, it's real to the patient. The pain is usually chronic and may, in many cases, interfere with interpersonal relationships or employment.

Causes and incidence

Pain disorder has no specific cause, but it may be related to severe psychological stress or conflict. The pain provides the patient with a means to cope with upsetting psychological issues. For example, a person with dependency needs may develop this disorder as an acceptable way to receive care and attention. The pain may have special significance such as leg pain in the same leg a parent lost through amputation. Pain disorder is more common in women than in men and usually has an onset in the 30s and 40s.

Signs and symptoms

The cardinal feature of pain disorder is a history of chronic, consistent complaints of pain without confirming physical disease. The patient may relate a long history of evaluations and procedures at multiple settings without much pain relief. Because of frequent hospitalizations, the patient may be familiar with pain medications and tranquilizers, ask for a specific drug, and know correct dosages and administration routes. Her motor movements may appear to be significantly impaired.

Physical examination of the painful site reveals that the pain doesn't follow anatomic pathways. The patient may not display typical nonverbal signs of pain, such as grimacing or guarding. (Sometimes such reactions are absent in the patient with chronic organic pain.) Palpation, percussion, and auscultation may not reveal expected associated signs. Psychosocial assessment may reveal a patient who's angry with health care professionals because they've failed to relieve her pain.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing pain disorder,* page 1312.

Treatment

In pain disorder, treatment aims to ease the pain and help the patient live with it. Thus, long, invasive evaluations and surgical interventions are avoided. Treatment at a comprehensive pain center may be helpful. Supportive measures for pain relief may include hot or cold packs, physical therapy,

distraction techniques, and cutaneous stimulation with massage or transcutaneous electrical nerve stimulation. Measures to reduce the patient's anxiety may help, as may an antidepressant medication such as a tricyclic antidepressant or a selective serotonin reuptake inhibitor. Duloxetine (Cymbalta), a selective norepinephrine reuptake inhibitor that's FDA-approved for diabetic peripheral neuropathy and depression, may be used.

DIAGNOSING PAIN DISORDER

The diagnosis of pain disorder is difficult because the perception of pain is subjective. Diagnosis is based on fulfillment of the following criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- Pain in one or more body sites is the predominant focus of the patient and is sufficiently severe to warrant clinical attention.
- The pain causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- Psychological factors are judged to have an important role in the onset, severity, exacerbation, and

maintenance of the pain.
- The symptom or deficit isn't intentionally produced or feigned.
- The pain isn't better accounted for by a mood, anxiety, or psychotic disorder and doesn't meet criteria for dyspareunia.

A continuing, supportive relationship with an understanding health care professional is essential for effective management; regularly scheduled follow-up appointments are helpful.

Analgesics become an issue because the patient believes that she has to "fight to be taken seriously." She should clearly be told what medication she will receive in addition to supportive pain-relief measures. Regularly scheduled analgesic doses can be more effective than scheduling medication as needed. Regular doses combat pain by reducing anxiety about asking for medication, and they eliminate unnecessary confrontations.

Special considerations

- Observe and record characteristics of the pain: severity, duration, and any precipitating factors.
- Provide a caring atmosphere in which the patient's complaints are taken seriously and every effort is made to provide relief. This means communicating to the patient that you'll collaborate on a plan of treatment, clearly stating the limitations. For example, you might say, "I can stay with you now for 15 minutes, but you can't receive another dose until 2 p.m."
- Don't tell the patient that she's imagining the pain or can wait longer for medication that's due. Assess her complaints and help her understand what's contributing to the pain.
- Provide other comfort measures, such as repositioning or massage, when possible.
- Encourage the patient to maintain independence despite her pain.

- Offer attention at times other than during the patient's complaints of pain to weaken the link to secondary gain.
- Avoid confronting the patient with the somatoform nature of her pain; this seldom is helpful because such pain is her means of avoiding psychological conflict.
- Consider psychiatric referrals; however, realize that the patient may resist psychiatric intervention, and don't expect it to replace analgesic measures.
- Teach the patient noninvasive, drug-free methods of pain control, such as guided imagery, relaxation techniques, and distraction through reading or writing.

Hypochondriasis

The dominant feature of hypochondriasis is an unrealistic misinterpretation of the severity and significance of physical signs or sensations as abnormal. This leads to preoccupation with fear of having a serious disease, which persists despite medical reassurance to the contrary. Hypochondriasis causes severe social and occupational impairment. It isn't due to other mental disorders, such as schizophrenia, mood disorder, or somatization disorder.

The course of hypochondriasis is usually chronic, although the severity of symptoms may vary.

Causes and incidence

Hypochondriasis isn't linked to a specific cause, but it commonly develops in people who have experienced an organic disease or in their relatives. It allows the patient to assume a dependent sick role to ensure that his needs are met. Such a patient is unaware of these unmet needs, and doesn't consciously cause his symptoms. Stress increases the risk of developing hypochondriasis.

Hypochondriasis occurs in men and women with equal frequency. It can begin at any age, but onset usually occurs between ages 20 and 30.

Signs and symptoms

The dominant feature of hypochondriasis is the misinterpretation of symptoms—usually multiple complaints that involve a single organ system — as signs of serious illness. As the medical evaluation proceeds, complaints may shift and change. Symptoms, which can range from specific to general, vague complaints, typically are associated with a preoccupation with normal body functions.

The hypochondriacal patient will relate a chronic history of waxing and waning symptoms. Commonly, he will have undergone multiple evaluations for similar symptoms or complaints of serious illness. His past contacts with health care professionals make him quite knowledgeable about illness, diagnosis, and treatment.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing hypochondriasis*.

Treatment

The goal of treatment is to help the patient continue to lead a productive life despite distressing symptoms and fears. After medical evaluation is complete, the patient should be told clearly that he doesn't have a serious disease. Continued medical follow-up, however, will help monitor his symptoms. Providing a diagnosis won't make hypochondriasis disappear, but it may ease the patient's anxiety.

DIAGNOSING HYPOCHONDRIASIS

A diagnosis of hypochondriasis is made when the patient's symptoms meet the following criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- Preoccupation with the fear of having or the belief that one has a serious disease is based on the person's misinterpretation of bodily symptoms.

- The preoccupation persists despite appropriate medical evaluation and reassurance.
- The fear of having or the belief that one has a serious disease isn't of delusional intensity (as in delusional disorder, somatic type) and isn't restricted to a circumscribed concern about appearance (as in body dysmorphic disorder).
- The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The disturbance has persisted for at least 6 months.
- The preoccupation isn't better accounted for by generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, a major depressive episode, separation anxiety, or another somatoform disorder.

Regular outpatient follow-up can help the patient deal with his symptoms and is needed to detect organic illness. (Up to 30% of these patients develop an organic disease.) Because the patient can be demanding and irritating, consistent follow-up may be difficult.

Most patients don't acknowledge any psychological influence on their symptoms and resist psychiatric treatment.

Special considerations

- Provide a supportive relationship that lets the patient feel cared for and understood. The patient with hypochondriasis feels real pain and distress, so don't deny his symptoms or challenge his behavior.
- Firmly state that medical test results were normal. Instead of reinforcing his symptoms, encourage him to discuss his other problems, and urge his family to do the same.
- Recognize that the patient will never be symptom-free, and don't become angry when he won't give up his disease. Such anger can drive

him to yet another unnecessary medical evaluation.

- Help the patient and his family find new ways to deal with stress other than the development of physical symptoms.

Body dysmorphic disorder

In body dysmorphic disorder, the patient is preoccupied with an imagined or slight defect in physical appearance. He may think he's hideous or grotesque even though others reassure him that he looks fine. The patient with this disorder thinks about the defect for at least 1 hour each day.

Causes and incidence

No cause for body dysmorphic disorder has been identified, although theories have been put forth. The biologic theory holds that some individuals may have a genetic predisposition to psychiatric disorders, making them more likely to develop body dysmorphic disorder. Certain stresses or life events, especially during adolescence, may precipitate the onset of the disorder. It may also be associated with an imbalance of serotonin or other brain chemicals.

The psychological theory holds that low self-esteem and a tendency to judge oneself almost exclusively by appearance may contribute to body dysmorphic disorder. These patients may be perfectionists who strive for an impossible ideal. In such patients, heightened perception about appearance causes increasing focus on every imperfection or slight abnormality.

In the United States, body dysmorphic disorder is estimated to occur in 1% to 2% of the general population, affecting males and females equally. However, its incidence may be underestimated because it frequently goes undiagnosed. It's a chronic condition and usually begins during the late teens. The average age of onset is 17.

Signs and symptoms

Body dysmorphic disorder may be suspected in the patient who reports or exhibits any of these behaviors:

- commonly checks reflection in the mirror, or avoids mirrors
- frequently compares appearance against that of other people
- frequently examines the appearance of other people
- tries to cover the perceived defect with clothing, makeup, or a hat or by changing posture
- seeks corrective treatment, such as surgery or dermatologic therapy, to eradicate the perceived defect, even though physicians, family numbers, and friends think such measures aren't needed
- constantly seeks reassurance from others about the perceived flaw or, conversely, tries to convince others of its repulsiveness
- performs long grooming rituals, such as repeatedly combing or cutting the hair or applying makeup or cover-up creams
- picks at the skin or squeezes pimples or blackheads for hours
- frequently touches the perceived problem area
- measures the body part that's repulsive
- is anxious and self-conscious
- feels acute distress over appearance, causing functional impairment
- avoids social situations where the perceived defect may be exposed
- has difficulty maintaining relationships with peers, family, and spouses
- performs poorly in school or work, or takes frequent sick days
- has low self-esteem
- has suicidal thoughts or behaviors.

Symptom severity varies. Some patients are able to manage their distress so that

they can function, some have severe functional impairment, and still others are so embarrassed or disgusted by their appearance that they avoid some or all social interaction.

Diagnosis

Body dysmorphic disorder shares many of the same symptoms and signs as other psychological illnesses, especially obsessive-compulsive disorder. To assess severity, testing may include diagnostic instruments, such as the Yale-Brown Obsessive-Compulsive Scale modified for body dysmorphic disorder or various others.

The diagnosis of body dysmorphic disorder is confirmed when the patient meets criteria from the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision. Criteria include:

- The patient is preoccupied with an imagined defect in appearance. If a slight physical abnormality actually is present, concern over it is markedly excessive.
- The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The preoccupation isn't better explained by another mental disorder such as anorexia nervosa.

Treatment

The goals of treatment for the patient include enhancement of his self-esteem, reduced preoccupation with the perceived flaw, and elimination of the harmful effects of compulsive behaviors. The patient also needs to improve functional abilities as well as express (and cope with) feelings of anxiety as they arise without resorting to excessive behaviors.

Cognitive-behavioral therapy and group therapies have proven helpful. Behavioral methods, including aversion therapy, thought-stopping, and flooding (also called *implosion therapy*), have proven effective. Other treatments include the use of selective serotonin reuptake inhibitors to help diminish preoccupation, distress, depression, and anxiety. Tricyclic antidepressants have also been effective.

Special considerations

- Provide an accepting, nonjudgmental atmosphere when caring for the patient.

- If the patient becomes involved in ritualistic thoughts and behaviors to the point of self-neglect, provide for basic needs, such as rest, nutrition, and grooming. Don't block ritualistic behavior, but do set limits.
- Help the patient explore feelings associated with the behavior.
- Engage the patient in activities that create positive accomplishments and raise self-esteem and confidence.
- Suggest active diversions, such as whistling or humming, to divert the patient's attention away from unwanted thoughts.
- Help the patient devise new ways to solve problems and develop more effective coping skills by setting limits on unacceptable behavior.
- Encourage the patient to use appropriate techniques to relieve stress, loneliness, and isolation.
- Monitor for desired and adverse effects of drug therapy, as appropriate.

DISSOCIATIVE DISORDERS

Dissociative identity disorder

A complex disturbance of identity and memory, dissociative identity disorder (formerly referred to as *multiple personality disorder*) is characterized by the existence of two or more distinct, fully integrated personalities in the same person. The personalities alternate in dominance. Each comprises unique memories, behavior patterns, and social relationships; in many cases, rigid and flamboyant personalities are combined. Usually, one personality is unaware of the existence of the others.

Causes and incidence

The cause isn't known. The patient typically has experienced abuse, commonly sexual, or another form of emotional trauma in childhood. A child may evolve multiple personalities to dissociate herself

from the traumatic situation. The dissociated contents become linked with one of many possible shaping influences for personality organization.

DIAGNOSING DISSOCIATIVE IDENTITY DISORDER

The diagnosis of dissociative identity disorder is based on fulfillment of the following criteria established in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- Two or more distinct personalities or personality states (each with its own relatively enduring pattern of perceiving, relating to, and thinking about the environment and self) are present.
- At least two of these personalities or personality states recurrently take full control of the person's behavior.
- The person can't recall important personal information that's too extensive to be explained by ordinary forgetfulness.
- The disturbance isn't caused by the direct physiologic effects of a substance or a general medical condition.

Dissociative identity disorder usually begins in childhood, but patients seldom seek treatment until much later in life. The disorder is three to nine times more common in women than in men.

Signs and symptoms

The patient may seek treatment for a concurrent psychiatric disorder present in one of the personalities. She may have a history of unsuccessful psychiatric treatment, or she may report periods of amnesia and disturbances in time perception. Family members may describe incidents that the patient can't recall as well as alterations in facial presentation, voice, and behavior.

Stress or idiosyncratically meaningful social or environmental cues commonly trigger the transition from one personality to another.

Although usually sudden, the transition can occur over hours or days. Hypnosis and amobarbital may facilitate transition.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing dissociative identity disorder*.

Treatment

Psychotherapy is essential to uniting the personalities and preventing the personality from splitting again. Treatment is usually intensive and prolonged, with success linked to the strength of the patienttherapist relationship with each of the personalities, all of which require equal respect and concern.

Special considerations

- Establish an empathetic relationship with each emerging personality.
- Monitor the patient's actions for evidence of self-directed violence or violence directed at others.
- Recognize even small gains.
- Stress the importance of continuing psychotherapy. Point out that the therapy can be prolonged, with alternating successes and failures, and that one or more of the personalities may resist treatment.

Dissociative fugue

The patient suffering from dissociative fugue wanders or travels while mentally blocking out a traumatic event. During the fugue state, he usually assumes a different personality and later can't recall what happened. The degree of impairment varies, depending on the duration of the fugue and the nature of the personality state it invokes. Dissociative fugue may be related to dissociative identity disorder, narcissistic personality disorder, and sleepwalking.

The age of onset varies. Although the fugue state is usually brief (hours to days), it can last for months and carry the patient

far from home. The prognosis for complete recovery is good, and recurrences are rare.

Causes and incidence

Dissociative fugue typically follows an extremely stressful event, such as combat experience, a natural disaster, a violent or abusive confrontation, or personal rejection. Heavy alcohol use may constitute a predisposing factor.

Signs and symptoms

Psychiatric examination of the patient with dissociative fugue may reveal that he has assumed a new, more uninhibited identity. If the new personality is still evolving, he may avoid social contact. On the other hand, he may have traveled to a distant location, set up a new residence, and developed a well-integrated network of social relationships that don't suggest any mental alteration.

The psychosocial history of such a patient may include episodes of violent behavior. After recovery, he typically can't remember these and other events that took place during the fugue state.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing dissociative fugue*.

Treatment

Psychotherapy aims to help the patient recognize the traumatic event that triggered the fugue state and develop reality-based strategies for coping with anxiety. A trusting, therapeutic relationship is essential for success.

Special considerations

- When providing care in this disorder, teach the patient effective coping strategies to use in stressful situations rather than strategies that distort reality.
- Help the patient with dissociative fugue recognize and deal with anxiety-producing experiences.
- Establish a therapeutic, nonjudgmental relationship with the patient.

DIAGNOSING DISSOCIATIVE FUGUE

The diagnosis of dissociative fugue is made when the patient's symptoms match the following criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- The predominant disturbance is sudden, unexpected travel away from home or the patient's customary place of work, with an inability to recall the past.
- The person experiences confusion about personal identity or assumption of a new partial or complete identity.
- The disturbance isn't caused by dissociative identity disorder, physiologic effects of a substance, or a general medical condition.
- The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Dissociative amnesia

The essential feature of dissociative amnesia is a sudden inability to recall important personal information that can't be explained by ordinary forgetfulness. The patient typically is unable to recall all events that occurred during a specific period, but other types of recall disturbance are also possible.

The *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision, recognizes five types of amnesia, based on the

time period and amount of information lost to recall:

- *localized amnesia*—failure to recall all events that occurred during a circumscribed time period
- *selective amnesia*— failure to recall some of the events that occurred during a circumscribed time period
- *generalized amnesia*—failure to recall all events over the entire life span

- *continuous amnesia*—failure to recall events subsequent to a specific time up to and including the present
- *systematized amnesia*—failure to recall certain categories of information.

DIAGNOSING DISSOCIATIVE AMNESIA

A diagnosis of dissociative amnesia is made when the patient's symptoms meet the following criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- The predominant disturbance is at least one episode of inability to recall important personal information, usually of a traumatic or stressful nature, that is too extensive to be explained by ordinary forgetfulness.
- The disturbance isn't caused by dissociative identity disorder, dissociative fugue, posttraumatic stress disorder, acute stress disorder, or somatization disorder. It also isn't caused by the direct physiologic effects of a substance or a neurologic or other general medical condition.
- The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

This disorder commonly occurs during war and natural disasters. Although it's more common in adolescents and young adult women, it's also seen in young men after combat experience. The amnesic event typically ends abruptly, and recovery is complete, with rare recurrences.

Causes and incidence

Dissociative amnesia follows severe psychosocial stress, commonly involving a threat of physical injury or death. Amnesia may also occur after thinking about or engaging in unacceptable behavior such as an extramarital affair.

Signs and symptoms

During the assessment interview, the amnesic patient may appear perplexed and disoriented, wandering aimlessly. He won't be able to remember the event that precipitated the episode and probably won't recognize his inability to recall information.

After the episode has ended, the patient is usually unaware that he has suffered what's known as a recall disturbance.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing dissociative amnesia*.

Treatment

Psychotherapy aims to help the patient recognize the traumatic event that triggered the amnesia and the anxiety it produced. A trusting, therapeutic relationship is essential to achieving this goal. The therapist subsequently attempts to teach the patient reality-based coping strategies.

Special considerations

- When providing care in this disorder, teach the patient effective coping strategies to use in stressful situations rather than those strategies that distort reality.

- Help the patient with dissociative amnesia recognize and deal with experiences that produce anxiety.
- Establish a therapeutic, nonjudgmental relationship with the patient.

Depersonalization disorder

Persistent or recurrent episodes of detachment characterize depersonalization disorder. During these episodes, self-awareness is temporarily altered or lost; the patient in many cases perceives this alteration in consciousness as a barrier between himself and the outside world. The sense of depersonalization may be restricted to a single body part, such as a limb, or it may encompass the whole self. The patient with this disorder may feel that he's mechanical, in a dream, or detached from his body.

Although the patient seldom loses touch with reality completely, the episodes of depersonalization

may cause him severe distress. Depersonalization disorder usually has a sudden onset in adolescence or early in adult life. It follows a chronic course, with periodic exacerbations and remissions, and resolves gradually.

Causes and incidence

Depersonalization disorder typically stems from severe stress, including war experiences, accidents, and natural disasters. It may also be due to neurologic or systemic disease.

Signs and symptoms

The patient with depersonalization disorder may complain of feeling detached from his entire being and body, as if he were watching himself from a distance or living in a dream. He may also report sensory anesthesia, a loss of self-control, difficulty speaking, and feelings of derealization and losing touch with reality.

Common findings during the assessment interview include symptoms of depression, obsessive rumination, somatic concerns, anxiety, fear of

going insane, a disturbed sense of time, and a prolonged recall time as well as physical complaints such as dizziness.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing depersonalization disorder.*

Treatment

Psychotherapy aims to establish a trusting, therapeutic relationship in which the patient recognizes the traumatic event that triggered the disorder and the anxiety it evoked. The therapist subsequently teaches the patient to use reality-based coping strategies rather than to detach himself from the situation.

Special considerations

- When providing care in this disorder, assist the patient in using reality-based coping strategies under stress rather than those strategies that distort reality.
- Help the patient who has depersonalization disorder recognize and deal with experiences that produce anxiety.
- Establish a therapeutic, nonjudgmental relationship with the patient.

DIAGNOSING DEPERSONALIZATION DISORDER

The depersonalization disorder diagnosis is made when the patient's symptoms match the following criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- The person has persistent or recurrent experiences of feeling detached from mind or body (as if he were an outside observer) or feeling like an automaton (as if he were in a dream).
- During the depersonalization experience, reality testing remains intact.

- The depersonalization causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The depersonalization experience doesn't occur exclusively during the course of another mental disorder, such as schizophrenia, panic disorder, acute stress disorder, or another dissociative disorder, and isn't due to the direct physiologic effects of a substance or a general medical condition.

Personality disorders

Defined as individual traits that reflect chronic, inflexible, and maladaptive patterns of behavior, personality disorders cause social discomfort and impair social and occupational functioning. The *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision, groups personality disorders into three clusters:

- Cluster A — paranoid, schizoid, and schizotypal personality disorders. These disorders share odd or eccentric behavior.
- Cluster B — antisocial, borderline, histrionic, and narcissistic personality disorders. Dramatic, emotional, or erratic behavior highlights these disorders.
- Cluster C — avoidant, dependent, and obsessive-compulsive personality disorders. These disorders are marked by anxious or fearful behavior.

Each disorder produces characteristic signs and symptoms, which may vary among patients and even with the same patient at different times.

Personality disorders are lifelong conditions with an onset in adolescence or early adulthood. Cluster A and B disorders tend to grow less intense in middle age and late life, whereas cluster C disorders tend to become exaggerated. Patients with cluster B disorders are susceptible to

substance abuse, poor impulse control, and suicidal behavior, which may shorten lives.

Personality disorders overlap with other psychiatric disorders, such as substance abuse disorders, mood disorders, and anxiety disorders.

Causes and incidence

Various theories attempt to explain the origin of personality disorders. Genetic factors influence the biological basis of brain function as well as basic personality structure. In turn, personality structure affects how a person responds to life experiences and interacts with the social environment. Over time, each person develops distinctive ways of perceiving the world and of feeling, thinking, and behaving.

Some researchers suspect that poor regulation of the areas controlling emotion within the brain increases the risk of a personality disorder, especially when combined with such factors as abuse, neglect, or separation. For a biologically predisposed person, the major developmental challenges of adolescence and early adulthood may trigger a personality disorder.

Social theories hold that disorders reflect learned responses, having much to do with reinforcement, modeling, and aversive stimuli as contributing factors. According to psychodynamic theories, personality disorders reflect deficiencies in ego and superego development and are related to poor mother-child relationships characterized by unresponsiveness, overprotectiveness, or early separation.

Personality disorders are common and affect 10% to 15% of the population in the United States. Gender influences presence; for example, antisocial and obsessive-compulsive personality disorders are more common in men, whereas borderline, dependent, and histrionic personality disorders are more prevalent in women.

Signs and symptoms

Each specific personality disorder produces characteristic signs and symptoms, which may vary among patients and within the same patient at different times. In general, the history of the patient with a personality disorder will reveal long-standing difficulties in interpersonal

relationships, ranging from dependency to withdrawal, and problems in occupational functioning, with effects ranging from compulsive perfectionism to intentional sabotage.

The patient with a personality disorder may show any degree of self-confidence, ranging from no self-esteem to arrogance. Convinced that his behavior is normal, he avoids responsibility for its consequences, commonly resorting to projections and blame.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing personality disorders*.

Treatment

Personality disorders are difficult to treat. Successful therapy requires a trusting relationship in which the therapist can use a direct approach. The type of therapy chosen depends on the patient's symptoms. Family and group therapies are usually effective.

Cognitive and self-help groups have also been beneficial. Dialectical behavioral therapy is a newer modality used to treat patients with personality disorders.

DIAGNOSING PERSONALITY DISORDERS

The diagnosis of a recognized personality disorder is made when a patient's symptoms match the diagnostic criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Antisocial personality disorder

- This disorder manifests as a pervasive disregard for and violation of the rights of others occurring since age 15, as indicated by at least three of the following:
  - The person fails to conform to social norms with respect to lawful behavior, as demonstrated by

repeatedly performing acts that are grounds for arrest.

– The person exhibits deceitfulness, as indicated by repeated lying, using aliases, or conning others for personal profit or pleasure.

– The person demonstrates impulsivity or failure to plan ahead.

– The person is irritable and aggressive, as indicated by repeated physical fights or assaults.

– The person has reckless disregard for the safety of self or others.

– The person shows consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations.

– The person lacks remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from others.

- The person is at least age 18.
- The person's history includes evidence of a conduct disorder with an onset before age 15.
- The antisocial behavior doesn't occur exclusively during the course of schizophrenia or a manic episode.

Avoidant personality disorder

This pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation, beginning by early adulthood and present in a variety of contexts, is indicated by at least four of the following:

- The person avoids social or occupational activities that involve significant interpersonal contact because of fears of criticism, disapproval, or rejection.

- The person is unwilling to get involved with people unless he's certain that they will like him.
- The person shows restraint within intimate relationships because of the fear of being shamed or ridiculed.
- The person is preoccupied with being criticized or rejected in social situations.
- The person's feelings of inadequacy inhibit him in new interpersonal situations.
- The person views himself as socially inept, personally unappealing, or inferior to others.
- The person is unusually reluctant to take personal risks or to engage in any new activities because they may prove embarrassing.

Borderline personality disorder

This pervasive pattern of instability of interpersonal relationships, self-image and affect, and marked impulsivity, beginning by early adulthood and present in various contexts, is indicated by at least five of the following features:

- The person makes frantic efforts to avoid real or imagined abandonment (excluding suicidal or self-mutilating behavior).
- The person has a pattern of unstable and intense interpersonal relationships characterized by alternating extremes of overidealization and devaluation.
- The person has an identity disturbance characterized by a markedly and persistently unstable self-image or sense of self.
- The person shows impulsiveness in at least two areas that are potentially self-damaging,

such as spending, sexual activity, substance abuse, shoplifting, reckless driving, and binge eating (excluding suicidal or self-mutilating behavior).

- The person engages in recurrent suicidal threats, gestures, or behavior or in self-mutilating behavior.
- The person has affective instability resulting from marked mood reactivity (for example, depression, irritability, or anxiety, lasting usually a few hours and seldom more than a few days).
- The person has chronic feelings of emptiness or boredom.
- The person has inappropriate intense anger or difficulty controlling anger.
- The person has transient, stressrelated paranoid ideation or severe dissociative symptoms.

Dependent personality disorder

This pervasive and excessive need to be taken care of that leads to submissive and clinging behavior and fears of separation, beginning by early adulthood and present in several contexts, is indicated by at least five of the following:

- The person has difficulty making everyday decisions without an excessive amount of advice or reassurance from others.
- The person needs others to assume responsibility for most major areas of his life.
- The person has difficulty expressing disagreement with others because of fear of loss of support or approval (excluding realistic fears of retribution).
- The person has difficulty initiating projects or doing things on his own (because of a lack of self-confidence

in his judgment or abilities rather than a lack of motivation or energy).

- The person goes to excessive lengths to obtain nurture and support from others, to the point of volunteering to do things that are unpleasant.
- The person feels uncomfortable or helpless when alone because of exaggerated fears of inability to care for himself.
- The person urgently seeks another relationship as a source of care and support when a close relationship ends.
- The person is unrealistically preoccupied with fears of being left to take care of himself.

Histrionic personality disorder

This pervasive pattern of excessive emotionality and attention-seeking behavior, beginning by early adulthood and present in various contexts, is indicated by at least five of the following:

- The person is uncomfortable in situations in which he isn't the center of attention.
- The person's interaction with others is commonly characterized by inappropriately sexually seductive or provocative behavior.
- The person displays rapidly shifting and shallow expression of emotions.
- The person consistently uses physical appearance to draw attention to self.
- The person has a style of speech that is excessively impressionistic and lacking in detail.
- The person shows self-dramatization, theatricality, and exaggerated emotional expression.

- The person is suggestible (easily influenced by others or circumstances).
- The person considers relationships to be more intimate than they actually are.

Narcissistic personality disorder

This pervasive pattern of grandiosity, need for admiration, and lack of empathy, beginning by early adulthood and present in various contexts, is indicated by at least five of the following:

- The person has a grandiose sense of self-importance.
- The person is preoccupied with fantasies of unlimited success, power, brilliance, beauty, or ideal love.
- The person believes that he's special and unique and can only be understood by, or should associate with, other special or high-status people (or institutions).
- The person requires excessive admiration.
- The person has a sense of entitlement (an unreasonable expectation of especially favorable treatment or automatic compliance with his expectations).
- The person is interpersonally exploitive, taking advantage of others to achieve his own ends.
- The person lacks empathy.
- The person is typically envious of others or believes that others are envious of him.
- The person shows arrogant, haughty behaviors or attitudes.

Obsessive-compulsive personality disorder

This pervasive pattern of preoccupation with orderliness, perfectionism, and mental and interpersonal control at the expense of flexibility, openness, and efficiency, beginning by early adulthood and present in various contexts, is indicated by at least four of the following:

- The person is preoccupied with details, rules, lists, order, organization, or schedules to the extent that the core point of the activity is lost.
- The person shows perfectionism that interferes with task completion.
- The person is excessively devoted to work and productivity to the exclusion of leisure activities and friendships (not accounted for by obvious economic need).
- The person exhibits overconscientiousness, scrupulousness, and inflexibility about matters of morality, ethics, or values (not accounted for by cultural or religious identification).
- The person can't discard worn-out or worthless objects even when they have no sentimental value.
- The person is reluctant to delegate tasks or to work with others unless they submit exactly to his way of doing things.
- The person adopts a miserly spending style toward self and others; money is viewed as something to be hoarded in preparation for future catastrophes.
- The person shows rigidity and stubbornness.

Paranoid personality disorder

- The person must exhibit a pervasive and unwarranted tendency, beginning by early adulthood and present in various contexts, to interpret the actions of people as

deliberately demeaning or threatening, as indicated by at least four of the following:

– The person suspects, without sufficient basis, that he's being exploited, deceived, or harmed by others.

– The person questions without justification the loyalty or trustworthiness of friends or associates.

– The person is reluctant to confide in others because of unwarranted fear that the information will be used against him.

– The person finds hostile or evil meanings in benign remarks.

– The person bears grudges or is unforgiving of insults or slights.

– The person is easily slighted and quick to react with anger or to counterattack.

– The person questions without justification the fidelity of a spouse or sexual partner.

- The symptoms don't occur exclusively during the course of schizophrenia or other psychotic disorders and aren't the direct physiologic effect of a general medical condition.

Schizoid personality disorder

- The patient must exhibit a pervasive pattern of indifference to social relationships and a restricted range of emotional experience and expression, beginning by early adulthood and present in various contexts, as indicated by at least four of the following:

  – The person neither desires nor enjoys close relationships, including being part of a family.

– The person almost always chooses solitary activities.

– The person seldom, if ever, claims or appears to experience strong emotions, such as anger and joy.

– The person indicates little, if any, desire to have sexual experiences with another person.

– The person is indifferent to the praise and criticism of others.

– The person has no close friends or confidants other than immediate relatives.

– The person displays flat affect.

- The symptoms don't occur exclusively during the course of schizophrenia, another psychotic disorder, or a pervasive developmental disorder and aren't the direct physiologic effect of a general medical condition.

Schizotypal personality disorder

- This pervasive pattern of social and interpersonal deficits is marked by acute discomfort with, and reduced capacity for, close relationships as well as by cognitive or perceptual distortions and eccentricities of behavior, beginning by early adulthood and present in various contexts. The person with schizotypal personality disorder has at least five of the following:

  – ideas of reference (excluding delusions of reference)

  – odd beliefs or magical thinking, influencing behavior and inconsistent with subcultural norms

  – unusual perceptual experiences, including bodily illusions

  – odd thinking and speech

  – suspiciousness or paranoid thinking

– inappropriate or flat affect

– odd behavior or appearance

– no close friends or confidants other than first-degree relatives

– excessive social anxiety that doesn't diminish with familiarity and tends to be associated with paranoid fears rather than negative self-judgment.

- The symptoms don't occur exclusively during the course of schizophrenia, a mood disorder with psychotic features, another psychotic disorder, or a pervasive developmental disorder.

Drug therapy is effective in some types of personality disorders; for example, pimozide has been successfully used to reduce paranoia ideation in some patients with paranoid personality disorder. Antipsychotic drugs (olanzapine or risperidone) may be used to treat severe agitation or delusional thinking. Selective serotonin reuptake inhibitors, such as fluoxetine, may be used to treat irritability, anger, and obsessional thinking. Anxiolytics may be used to treat severe anxiety that interferes with normal thinking.

Hospital inpatient milieu therapy can be effective in crisis situations and possibly for long-term treatment of some disorders. Inpatient treatment is controversial, however, because most patients with personality disorders don't comply with extended therapeutic regimens; for such patients, outpatient therapy may be more helpful.

Special considerations

- Provide consistent care. Take a direct, consistent approach to ensure trust. Keep in mind that many of these patients don't respond well to interviews, whereas others are charming and convincing.
- Teach the patient social skills, and reinforce appropriate behavior.

- Encourage expression of feelings, selfanalysis of behavior, and accountability for actions.
- Set appropriate boundaries with the patient who may push limits and blame others for his feelings and behaviors.

Specific care measures vary with the particular personality disorder.

For *antisocial personality disorder:*

- Be clear about your expectations and the consequences of failing to meet them.
- Use a straightforward, matter-of-fact approach to set limits on unacceptable behavior. Encourage and reinforce positive behavior.
- Expect the patient to refuse to cooperate so that he can gain control.
- Avoid power struggles and confrontations to maintain the opportunity for therapeutic communication.
- Avoid defensiveness and arguing.
- Observe for physical and verbal signs of agitation.
- Help the patient manage anger.
- Teach the patient social skills and reinforce appropriate behavior.

For *avoidant personality disorder:*

- Assess for signs of depression. Impaired social interaction increases the risk of affective disorders.
- Establish a trusting relationship with the patient. Be aware that he may become dependent on the few staff members whom he believes he can trust.
- Make sure that the patient has plenty of time to prepare for all upcoming procedures. This patient has difficulty with surprises.
- Inform the patient when you will and won't be available if he needs assistance.

For *borderline personality disorder:*

- Deliberate self-harm is different from a suicide attempt. Self-harm involves such activities as cutting oneself, burning oneself, hitting

one's head or other body part or inserting objects into the body with the intent of causing pain. Self-harm is often used as a way to modulate affect or to control uncomfortable feelings. While some patients do die from serious self-harm, the patient's intent isn't to die, but rather to decrease emotional pain. Self-harm behavior is often seen in patients with borderline personality disorder.

- Encourage the patient to take responsibility for himself. Don't attempt to rescue him from the consequences of his actions (except for suicidal and self-mutilating behaviors).
- Don't try to solve problems that the patient can solve himself.
- Maintain a consistent approach in all interactions with the patient, and ensure that other staff members do so as well.
- Recognize behaviors that the patient uses to manipulate people so that you can avoid unconsciously reinforcing them.
- Set appropriate expectations for social interactions, and praise the patient when expectations are met.
- To promote trust, respect the patient's personal space.
- Recognize that the patient may idolize some staff members and devalue others.
- Don't take sides in the patient's disputes with other staff members.

For *dependent personality disorder:*

- Encourage the patient to make decisions. Continue to provide support and reassurance as his decision-making ability improves.
- Give the patient as much opportunity to control treatment as possible. Offer options and allow choice, even if all are chosen.
- Encourage activities that require decision-making to promote autonomy.

For *histrionic personality disorder:*

- Give the patient choices in care strategies, and incorporate his wishes into the plan of treatment as much as possible. By increasing his sense of self-control, you'll reduce his anxiety.

- Be aware that the patient will want to “win over” caregivers and, at least initially, will be responsive and cooperative.

For *narcissistic personality disorder:*

- Convey respect and acknowledge the patient's sense of self-importance so that a coherent sense of self can be reestablished. Don't reinforce either pathologic grandiosity or weakness.
- If the patient makes unreasonable demands or has unreasonable expectations,

  tell him in a matter-of-fact way that he's being unreasonable. Remain nonjudgmental because a critical attitude may make the patient more demanding and difficult. Don't avoid him as this could increase maladaptive attention-seeking behavior.
- Focus on positive traits, or on feelings of pain, loss, or rejection.

For *obsessive-compulsive personality disorder:*

- Allow the patient to participate in his own treatment plan by offering choices whenever possible.
- Adopt a professional approach in your interactions with the patient. Avoid informality; this patient expects strict attention to detail.

For *paranoid personality disorder:*

- Avoid situations that threaten the patient's autonomy or challenge his beliefs.
- Approach the patient in a straightforward and candid manner, adopting a professional, rather than a casual or friendly, attitude. Remember that the paranoid patient easily misinterprets remarks intended to be humorous.
- Encourage the patient to take part in social interactions to expose him to others' perceptions and realities and to promote social skills development.
- Help the patient identify negative behaviors that interfere with his relationships so that he can see how his behavior affects others.

- Provide a supportive and nonjudgmental environment in which the patient can safely explore and verbalize his feelings.

For *schizoid personality disorder:*

- Remember that the patient with schizoid personality disorder needs close human contact but is easily overwhelmed. Respect the patient's need for privacy, and slowly build a trusting, therapeutic relationship, so that he finds more pleasure than fear in relating to you.
- Give the patient plenty of time to express his feelings. Keep in mind that, if you push him to do so before he's ready, he may retreat.
- Recognize the patient's need for physical and emotional distance.
- Remember that the patient needs close human contact but is easily overwhelmed.

For *schizotypal personality disorder:*

- Recognize that the patient with this disorder is easily overwhelmed by stress. Allow him plenty of time to make difficult decisions.
- Avoid defensiveness and arguing.
- Recognize the patient's need for physical and emotional distance.
- Be aware that the patient may relate unusually well to certain staff members and not at all to others.

EATING DISORDERS

Bulimia nervosa

The essential features of bulimia nervosa include eating binges followed by feelings of guilt, humiliation, and self-deprecation. These feelings cause the patient to engage in self-induced vomiting, use laxatives or diuretics, follow a strict diet, or fast to overcome the effects of the binges. Unless the patient spends an excessive amount of time bingeing and purging, bulimia nervosa seldom is incapacitating. However, electrolyte imbalances (metabolic alkalosis, hypochloremia, and hypokalemia) and dehydration can occur, increasing the risk of life-threatening physical complications.

Causes and incidence

The cause of bulimia is unknown, but psychosocial factors may contribute to its development. These factors include family disturbance or conflict, sexual abuse, maladaptive learned behavior, struggle for control or self-identity, cultural overemphasis on physical appearance, and parental obesity. Bulimia nervosa is associated with depression, anxiety, phobias, and obsessive-compulsive disorder.

Eating disorders are most prevalent in affluent cultural groups and are essentially unknown in cultural groups where poverty and malnutrition are prevalent. In developing countries, almost no cases of eating disorders have been recognized. Cultural forces that influence body image are major factors in the development of eating disorders. In most cultures in the U.S., thinness is valued and being overweight is denigrated. However, media messages are mixed. A

commercial for fast food may be seen right after a commercial for a weight loss program. Young girls especially are at risk for these mixed messages, although boys may be influenced as well. Also, certain sports or activities such as ballet, wrestling, and gymnastics may encourage potentially unhealthy weight loss.

Bulimia nervosa usually begins in adolescence or early adulthood and can occur simultaneously with anorexia nervosa. It affects nine women for every man. Nearly 2% of adult women meet the diagnostic criteria for bulimia nervosa; 5% to 15% have some symptoms of the disorder.

Signs and symptoms

The history of a patient with bulimia nervosa is characterized by episodes of binge eating that may occur up to several times per day. The patient commonly reports a binge-eating episode during which she continues eating until abdominal pain, sleep, or the presence of another person interrupts it. The preferred food is usually sweet, soft, and high in calories and carbohydrate content.

The patient with bulimia may appear thin and emaciated. Typically, however, although her weight frequently fluctuates, it usually stays

within normal limits— through the use of diuretics, laxatives, vomiting, and exercise. So, unlike the patient with anorexia, the patient with bulimia can usually hide her eating disorder.

Overt clues to this disorder include hyperactivity, peculiar eating habits or rituals, frequent weighing, and a distorted body image. (See *Characteristics of patients with bulimia*.)

The patient may complain of abdominal and epigastric pain caused by acute gastric dilation. She may also have amenorrhea. Repetitive vomiting may cause painless swelling of the salivary glands, hoarseness, throat irritation or lacerations, and dental erosion. The patient may also exhibit calluses on the knuckles or abrasions and scars on the dorsum of the hand, resulting from tooth injury during self-induced vomiting, although it's common for the patient with bulimia to induce vomiting chemically such as with ipecac.

CHARACTERISTICS OF PATIENTS WITH BULIMIA

Recognizing patients with bulimia isn't always easy. Unlike patients with anorexia, patients with bulimia don't deny that their eating habits are abnormal, but they commonly conceal their behavior out of shame. If you suspect bulimia nervosa, watch for these features:

- difficulty with impulse control
- chronic depression
- exaggerated sense of guilt
- low tolerance for frustration
- recurrent anxiety
- feelings of alienation
- self-consciousness
- difficulty expressing feelings such as anger
- impaired social or occupational adjustment.

A patient with bulimia commonly is perceived by others as a “perfect” student, mother, or career woman; an adolescent may be distinguished for participation in competitive activities such as sports. However, the

patient's psychosocial history may reveal an exaggerated sense of guilt, symptoms of depression, childhood trauma (especially sexual abuse), parental obesity, or a history of unsatisfactory sexual relationships.

Diagnosis

For characteristic findings in this condition, see *Diagnosing bulimia nervosa*, page 1328.

Additional diagnostic tools include the Beck Depression Inventory, which may identify coexisting depression, and laboratory tests to help determine the presence and severity of complications. Serum electrolyte studies may show elevated bicarbonate, decreased potassium, and decreased sodium levels.

A baseline electrocardiogram may be done if tricyclic antidepressants will be prescribed for the patient.

DIAGNOSING BULIMIA NERVOSA

The diagnosis of bulimia is made when the patient meets criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision. Both of the behaviors listed below must occur at least twice per week for 3 months:

- recurrent episodes of binge eating (rapid consumption of a large amount of food in a discrete period and a feeling of lack of control over eating behavior during the eating binges)
- recurrent inappropriate compensatory behavior to prevent weight gain (self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; excessive exercise).

Treatment

Treatment of bulimia nervosa may continue for several years. Interrelated physical and psychological symptoms must be treated simultaneously. Merely promoting weight gain isn't sufficient to guarantee long-term recovery. A patient whose physical status is severely compromised by inadequate or chaotic eating patterns is difficult to engage in the psychotherapeutic process.

Psychotherapy concentrates on interrupting the binge-purge cycle and helping the patient regain control over her eating behavior. Inpatient or outpatient treatment includes behavior modification therapy, which may take place in highly structured psychoeducational group meetings. Cognitive behavioral therapy, group therapy, and family therapy, which address the eating disorder as a symptom of unresolved conflict, may help the patient understand the basis of her behavior and teach her self-control strategies. Antidepressant drugs may be used as an adjunct to psychotherapy. Fluoxetine (Paxil) or other selective serotonin reuptake inhibitors may be prescribed.

The patient may also benefit from participation in self-help groups, such as Overeaters Anonymous, or in a drug rehabilitation program if she has a concurrent substance abuse problem.

Special considerations

- Supervise the patient during mealtimes and for a specified period after meals (usually 1 hour). Set a time limit for each meal. Provide a pleasant, relaxed environment for eating.
- Use behavior modification techniques, and reward the patient for satisfactory weight gain.
- Establish a contract with the patient, specifying the amount and type of food to be eaten at each meal.
- Encourage her to recognize and express her feelings about her eating behavior. Maintain an accepting and nonjudgmental attitude, controlling your reactions to her behavior and feelings.
- Encourage the patient to talk about stressful issues, such as achievement, independence, socialization, sexuality, family problems, and control.
- Identify the patient's elimination patterns.

- Assess her suicide potential.
- Refer the patient and her family to the American Anorexia and Bulimia Association and to Anorexia Nervosa and Related Eating Disorders for additional information and support.
- Teach the patient how to keep a food journal to monitor treatment progress.
- Outline the risks of laxative, emetic, and diuretic abuse for the patient.
- Provide assertiveness training to help the patient gain control over her behavior and achieve a realistic and positive self-image.

Anorexia nervosa

The key feature of anorexia nervosa is selfimposed starvation, resulting from a distorted body image and an intense, irrational fear of gaining weight, even when the patient is obviously emaciated. A patient with anorexia is preoccupied with her

body size, describes herself as “fat,” and commonly expresses dissatisfaction with a particular aspect of her physical appearance. Although the term *anorexia* suggests that the patient's weight loss is associated with a loss of appetite, this is rare. Anorexia nervosa and bulimia nervosa can occur simultaneously. In anorexia nervosa, the refusal to eat may be accompanied by compulsive exercising, self-induced vomiting, or laxative or diuretic abuse.

Causes and incidence

No causes of anorexia nervosa have been identified; however, genetic, social, and psychological factors have been implicated. Researchers in neuroendocrinology are seeking a physiologic cause, but have found nothing definite. Clearly, social attitudes that equate slimness with beauty play some role in provoking this disorder; family factors are also implicated. Most theorists believe that refusing to eat is a subconscious effort to exert personal control over one's life. Anorexia nervosa has

been associated with other psychiatric disorders, such as obsessive-compulsive disorder, depression, and anxiety.

Anorexia occurs in 5% to 10% of the population; about 95% of those affected are women. This disorder occurs primarily in adolescents and young adults but may also affect older women. The occurrence among males is rising. The prognosis varies but improves if the patient is diagnosed early or if she wants to overcome the disorder and seeks help voluntarily. Mortality ranges from 5% to 15% — the highest mortality associated with a psychiatric disturbance. One-third of these deaths can be attributed to suicide.

Signs and symptoms

The patient's history usually reveals a 25% or greater weight loss for no organic reason, coupled with a morbid dread of being fat and a compulsion to be thin. Such a patient tends to be angry and ritualistic. She may report amenorrhea, infertility, loss of libido, fatigue, sleep alterations, intolerance to cold, and constipation.

Hypotension and bradycardia may be present. Inspection may reveal an emaciated appearance, with skeletal muscle atrophy, loss of fatty tissue, atrophy of breast tissue, blotchy or sallow skin, lanugo on the face and body, and dryness or loss of scalp hair. If also bulimic, calluses on the knuckles, and abrasions and scars on the dorsum of the hand may result from tooth injury during self-induced vomiting. Other signs of vomiting include dental caries and oral or pharyngeal abrasions. (See *Complications of anorexia nervosa,* page 1330.)

Palpation may disclose painless salivary gland enlargement and bowel distention. Slowed reflexes may occur on percussion. Oddly, the patient usually demonstrates hyperactivity and vigor (despite malnourishment). She may exercise avidly without apparent fatigue.

During psychosocial assessment, the patient with anorexia may express a morbid fear of gaining weight and an obsession with her physical appearance. Paradoxically, she may also be obsessed with food, preparing elaborate meals for others. Social regression, including poor sexual adjustment and fear of failure, is common. Like bulimia nervosa, anorexia nervosa is commonly associated with depression. The patient

may report feelings of despair, hopelessness, and worthlessness as well as suicidal thoughts.

Diagnosis

For characteristic findings in patients with this condition, see *Diagnosing anorexia nervosa,* page 1331.

Laboratory tests help to identify various disorders and deficiencies and help to rule out endocrine, metabolic, and central nervous system abnormalities; cancer; malabsorption syndrome; and other disorders that cause physical wasting.

Abnormal findings that may accompany a weight loss exceeding 30% of normal body weight include:

- low hemoglobin level, platelet count, and white blood cell count
- prolonged bleeding time due to thrombocytopenia
- decreased erythrocyte sedimentation rate
- decreased levels of serum creatinine, blood urea nitrogen, uric acid, cholesterol, total protein, albumin, sodium, potassium, chloride, calcium, and fasting blood glucose (resulting from malnutrition)
- elevated levels of alanine aminotransferase and aspartate aminotransferase in severe starvation states
- elevated serum amylase levels when pancreatitis isn't present
- in females, decreased levels of serum luteinizing hormone and folliclestimulating hormone
- decreased triiodothyronine levels resulting from a lower basal metabolic rate
- dilute urine caused by the kidneys' impaired ability to concentrate urine
- nonspecific ST interval, prolonged PR interval, and T-wave changes on the electrocardiogram. Ventricular arrhythmias may also be present.

COMPLICATIONS OF ANOREXIA NERVOSA

Serious medical complications can result from the malnutrition, dehydration, and electrolyte imbalances caused by prolonged starvation, frequent vomiting, or laxative abuse that's typical in anorexia nervosa.

Malnutrition and related problems

Malnutrition may cause hypoalbuminemia and subsequent edema or hypokalemia, leading to ventricular arrhythmias and renal failure.

Poor nutrition and dehydration, coupled with laxative abuse, produce changes in the bowel similar to those in chronic inflammatory bowel disease. Frequent vomiting can cause esophageal erosion, ulcers, tears, and bleeding as well as tooth and gum erosion and dental caries.

Cardiovascular consequences

Cardiovascular complications, which can be life-threatening, include decreased left ventricular muscle mass, chamber size, and myocardial oxygen uptake; reduced cardiac output; hypotension; bradycardia; electrocardiographic changes, such as a nonspecific ST interval, T-wave changes, and a prolonged PR interval; heart failure; and sudden death, possibly caused by ventricular arrhythmias.

Infection and amenorrhea

Anorexia nervosa may increase the patient's susceptibility to infection.

In addition, amenorrhea, which may occur when the patient loses about 25% of her normal body weight, usually is associated with anemia. Possible complications of prolonged amenorrhea include estrogen deficiency (increasing the risk of calcium deficiency and osteoporosis) and infertility. Menses usually returns to

normal when the patient weighs at least 95% of her normal weight.

Treatment

Appropriate treatment aims to promote weight gain or control the patient's compulsive binge eating and purging. Malnutrition and the underlying psychological dysfunction must be corrected. Hospitalization in a medical or psychiatric unit may be required to improve the patient's precarious physical condition. The hospital stay may be as brief as 2 weeks or may stretch from a few months to 2 years or longer.

A team approach to care — combining aggressive medical management, nutritional counseling, and individual, group, or family psychotherapy or behavior modification therapy — is most effective in treating anorexia. Treatment results may be discouraging. Many clinical centers are now developing inpatient and outpatient programs specifically aimed at managing eating disorders.

Treatment may include behavior modification (privileges depend on weight gain); curtailed activity for physical reasons (such as arrhythmias); vitamin and mineral supplements; a reasonable diet with or without liquid supplements; subclavian, peripheral, or enteral hyperalimentation (enteral and

peripheral routes carry less risk of infection); and group, family, or individual psychotherapy.

Mood stabilizers such as selective serotonin reuptake inhibitors and tricyclic antidepressants have been used to attempt to treat patients with anorexia nervosa but have shown few positive outcomes. The patient with anorexia nervosa shouldn't be “tricked” into weight gain by prescribing psychopharmacological drugs that have weight gain as a major side effect. This could increase the patient's anxiety and result in purging behaviors.

All forms of psychotherapy, from psychoanalysis to hypnotherapy, have been used in treating anorexia nervosa, with varying success. To be successful, psychotherapy should address the underlying problems of low

self-esteem, guilt, anxiety, feelings of hopelessness and helplessness, and depression.

Special considerations

- During hospitalization, regularly monitor the patient's vital signs, nutritional status, and intake and output. Weigh the patient daily — before breakfast if possible. Because she fears being weighed, vary the weighing routine. Keep in mind that weight should increase from morning to night.
- Help the patient establish a target weight and support her efforts to achieve this goal.
- Negotiate an adequate food intake with the patient. Make sure she understands that she'll need to comply with this contract or lose privileges. Frequently offer small portions of food or drinks if the patient wants them. Allow the patient to maintain control over the types and amounts of food she eats, if possible.
- Maintain one-on-one supervision of the patient during meals and for 1 hour afterward to ensure compliance with the dietary treatment program. For the hospitalized patient with anorexia, food is considered a medication.
- During an acute anorexic episode, nutritionally complete liquids are more acceptable than solid food because they eliminate the need to choose between foods—something the patient with anorexia may find difficult. If tube feedings or other special feeding measures become necessary, fully explain these measures to the patient and be ready to discuss her fears or reluctance; limit the discussion about food itself.
- Expect a weight gain of about 1 lb (0.5 kg) per week.
- If edema or bloating occurs after the patient has returned to normal eating behavior, reassure her that this phenomenon is temporary. She may fear that she's becoming fat and stop complying with the plan of treatment.
- Encourage the patient to recognize and express her feelings freely. If she understands that she can be assertive, she may gradually learn that expressing her true feelings won't result in her losing control or love.

- If a patient receiving outpatient treatment must be hospitalized, maintain contact with her treatment team to facilitate a smooth return to the outpatient setting.
- Remember that the patient with anorexia uses exercise, preoccupation with food, ritualism, manipulation, and lying as mechanisms to preserve the only control she thinks that she has in her life.
- Because the patient and her family may need therapy to uncover and correct dysfunctional patterns, refer them to Anorexia Nervosa and Related Eating Disorders, a national information and support organization. This organization may help them understand what anorexia is, convince them that they need help, and help them find a psychotherapist or physician who's experienced in treating this disorder.
- Teach the patient how to keep a food journal, including the types of food eaten, eating frequency, and feelings associated with eating and exercise.
- Advise family members to avoid discussing food with the patient.

DIAGNOSING ANOREXIA NERVOSA

A diagnosis of anorexia nervosa is made when the patient meets the following criteria put forth in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- The patient refuses to maintain body weight over a minimal normal weight for age and height (for instance, weight loss leading to maintenance of body weight 15% below that expected) or failure to achieve expected weight gain during a growth period, leading to body weight 15% below that expected.
- The patient experiences intense fear of gaining weight or becoming fat, despite her underweight status.

- The patient has a distorted perception of body weight, size, or shape (that is, the person claims to feel fat even when emaciated or believes that one body area is too fat even when it's obviously underweight).
- In women, absence of at least three consecutive menstrual cycles when otherwise expected to occur.

SEXUAL AND GENDER IDENTITY DISORDERS

Female arousal and orgasmic disorders

Arousal disorder is an inability to experience sexual pleasure. According to the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision (*DSM-IV-TR*), the essential feature is a persistent or recurrent inability to attain, or to maintain until completion of the sexual activity, an adequate lubricationswelling response of sexual excitement. Orgasmic disorder, according to *DSM-IV-TR,* is a persistent or recurrent delay in or absence of orgasm after a normal sexual excitement phase.

Arousal and orgasmic disorders are considered primary if they exist in a female who has never experienced sexual arousal or orgasm; they're secondary when some physical, mental, or situational condition has inhibited or obliterated a previously normal sexual function. The prognosis is good for temporary or mild disorders resulting from misinformation or situational stress but is guarded for disorders that result from intense anxiety, chronically discordant relationships, psychological disturbances, or drug or alcohol abuse in either partner.

Causes and incidence

Any of these factors, alone or in combination, may cause arousal or orgasmic disorder:

- certain drugs, including antidepressants, central nervous system depressants, alcohol, street drugs, and, rarely, hormonal contraceptives

- general systemic illnesses, diseases of the endocrine or nervous system, or diseases that impair muscle tone or contractility
- gynecologic factors, such as chronic vaginal or pelvic infection or pain, congenital anomalies, and genital cancers
- hormonal changes associated with perimenopause and menopause
- stress and fatigue
- inadequate or ineffective stimulation
- psychological factors, such as performance anxiety, guilt, depression, or unconscious conflicts about sexuality
- relationship problems, such as poor communication, hostility or ambivalence toward the partner, fear of abandonment or of independence, or boredom with sex.

All these factors may contribute to involuntary inhibition of the orgasmic reflex. Another crucial factor is the fear of losing control of feelings or behavior. Whether or not these factors produce sexual dysfunction and the type of dysfunction depend on how well the woman copes with the resulting pressures. Physical factors may also cause arousal or orgasmic disorder.

ELDER TIP

Female sexual function and responses decline along with estrogen levels in the perimenopausal period. The decrease in estradiol levels during menopause affects nerve transmission and response in the peripheral vascular system. As a result, the timing and degree of vasoconstriction during the sexual response is affected, vasocongestion decreases, muscle

tension decreases, and contractions are fewer and less intense during orgasm.

Signs and symptoms

The female with arousal disorder has limited or absent sexual desire and experiences little or no pleasure from sexual stimulation. Physical signs of this disorder include lack of vaginal lubrication or absence of signs of genital vasocongestion.

Females with orgasmic disorder report an inability to achieve orgasm, either totally or under certain circumstances. Many females experience orgasm through masturbation or other means but not through intercourse alone. Others achieve orgasm with some partners but not with others.

Diagnosis

A thorough physical examination, laboratory tests, and a medical history rule out physical causes of arousal or orgasmic disorder. In the absence of such causes, a complete psychosexual history is the most important tool for assessment. Such a history should include:

- detailed information concerning the patient's level of sex education and previous sexual response patterns
- level of family stress or fatigue
- the patient's feelings during childhood and adolescence about sex in general and, specifically, about masturbation, incest, rape, sexual fantasies, and homosexual or heterosexual practices
- contraceptive practices and reproductive goals
- the patient's present relationship, including her partner's attitude toward sex
- assessment of the patient's self-esteem and body image
- a history of psychotherapy.

When the disorder causes marked distress or interpersonal difficulty, it may fulfill the diagnostic criteria for a *DSM-IV-TR* diagnosis.

Treatment

Arousal disorder is difficult to treat, especially if the female has never experienced sexual pleasure. Therapy is designed to help the patient relax and become aware of her feelings about sex and to eliminate guilt

and fear of rejection. Specific measures usually include sensate focus exercises similar to those developed by Masters and Johnson, which emphasize touching and awareness of sensual feelings all over the body—not just genital sensations—and minimize the importance of intercourse and orgasm. Psychoanalytic treatment consists of free association, dream analysis, and discussion of life patterns to achieve greater sexual awareness. One behavioral approach attempts to correct maladaptive patterns through systematic desensitization to situations that provoke anxiety, partially by encouraging the patient to fantasize about these situations.

The goal in treating orgasmic disorder is to decrease or eliminate involuntary inhibition of the orgasmic reflex. Treatment may include experiential therapy, psychoanalysis, or behavior modification.

Treatment of primary orgasmic disorder may involve teaching the patient selfstimulation. Also, the therapist may teach distraction techniques, such as focusing attention on fantasies, breathing patterns, or muscle contractions to relieve anxiety. The patient learns new behavior through exercises she does privately between sessions. Gradually, the therapist involves the patient's sexual partner in the treatment sessions; some therapists treat the couple as a unit from the outset.

Treatment of secondary orgasmic disorder is designed to decrease anxiety and promote the factors needed for the patient to experience orgasm. Sensate focus exercises are commonly used. The therapist should communicate an accepting attitude and help the patient understand that satisfactory sexual experiences don't always require coital orgasm.

If medication is suspected to be the cause of the disorder, a trial of a different drug may be indicated.

Special considerations

- Be alert for clues to arousal or orgasmic disorder when taking a health history.
- Maintain an open, nonjudgmental attitude toward the patient and her problem.

- Instruct the patient in anatomy and physiology of the reproductive system and in sexual response patterns.

- Refer the patient to a physician, nurse, psychologist, social worker, or counselor trained in sex therapy. Inform the patient that the therapist's certification by the American Association of Sex Educators, Counselors, and Therapists or by the Society for Sex Therapy and Research usually ensures quality treatment.
- If the therapist isn't certified by these organizations, advise the patient to ask about the therapist's credentials.

Dyspareunia

Dyspareunia is genital pain associated with intercourse. It may be mild, or it may be severe enough to affect enjoyment of intercourse. Dyspareunia is commonly associated with physical problems; less commonly, with a psychological disorder. The prognosis is good if the underlying disorder can be treated successfully.

Causes and incidence

Physical causes of dyspareunia include an intact hymen; deformities or lesions of the introitus or vagina; marked retroversion of the uterus; genital, rectal, or pelvic scar tissue; acute or chronic infections of the genitourinary tract; and disorders of the surrounding viscera (including residual effects of pelvic inflammatory disease or disease of the adnexal and broad ligaments).

Among the many other possible physical causes are:

- endometriosis
- benign and malignant growths and tumors
- insufficient lubrication
- radiation to the area
- allergic reactions to diaphragms, condoms, or other contraceptives.

Psychological causes include fear of pain or of injury during intercourse, recollection of a previous painful experience, guilty feelings about sex, fear of pregnancy or of injury to the fetus during pregnancy, anxiety caused by a new sexual partner or technique, and mental or physical fatigue. Men and women can suffer pain in the pelvic area during or soon after sexual intercourse.

Signs and symptoms

Dyspareunia produces discomfort, ranging from mild aches to severe pain before, during, or after intercourse. It may also be associated with vaginal itching or burning.

Diagnosis

Physical examination and laboratory tests help determine the underlying disorder. Diagnosis also depends on a detailed sexual history and the answers to such questions as: When does the pain occur? Does it occur with certain positions or techniques or at certain times during the sexual response cycle? Where does the pain occur? What's its quality, frequency, and duration? What factors relieve or aggravate it?

When the disorder causes marked distress or interpersonal difficulty, it may fulfill the diagnostic criteria from the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Treatment

Treatment of physical causes may include creams and water-soluble gels for inadequate lubrication, appropriate medications for infections, excision of hymenal scars, and gentle stretching of painful scars at the vaginal opening. The patient may be advised to change her coital position to reduce pain on deep penetration.

Methods of treating psychologically based dyspareunia vary with the particular patient. Sensate focus exercises deemphasize intercourse itself and teach appropriate foreplay techniques. Education about contraception methods can reduce fear of pregnancy; education about sexual activity during pregnancy can relieve fear of harming the fetus.

Special considerations

- Provide instruction concerning anatomy and physiology of the reproductive system, contraception, and the human sexual response cycle.
- When appropriate, provide advice and information on drugs that may affect the patient sexually and on lubricating gels and creams.
- Listen to the patient's complaints of sexrelated pain, and maintain a sympathetic, nonjudgmental attitude toward her, which

  will encourage her to express her feelings without embarrassment.

Vaginismus

Vaginismus is involuntary spastic constriction of the outer third vaginal muscles. This disorder may coexist with dyspareunia and, if severe, may prevent intercourse (a common cause of unconsummated marriages). Vaginismus affects females of all ages and backgrounds. The prognosis is excellent for a motivated patient who doesn't have untreatable organic abnormalities.

Causes and incidence

Vaginismus may be physical or psychological in origin. It may occur spontaneously as a protective reflex to pain or result from organic causes, such as hymenal abnormalities, genital herpes, obstetric trauma, and atrophic vaginitis.

Psychological causes may include:

- childhood and adolescent exposure to rigid, punitive, and guilt-ridden attitudes toward sex
- fears resulting from painful or traumatic sexual experiences, such as incest or rape
- early traumatic experience with pelvic examinations
- fear of pregnancy, sexually transmitted disease, or cancer.

Vaginismus is uncommon, affecting less than 2% of women in the United States.

Signs and symptoms

The female with vaginismus typically experiences muscle spasm with constriction and pain on insertion of any object into the vagina, such as a tampon, diaphragm, or speculum. She may profess a lack of sexual interest or a normal level of sexual desire.

Diagnosis

Diagnosis depends on the sexual history and pelvic examination to rule out physical disorders. The sexual history must include early childhood experiences and family attitudes toward sex, previous and current sexual responses, contraceptive practices and reproductive goals, feelings about her sexual partner, and specific details about pain on insertion of any object into the vagina.

CONFIRMING DIAGNOSIS

A carefully performed pelvic examination confirms the diagnosis by showing involuntary constriction of the musculature surrounding the outer portion of the vagina.

When the disorder causes marked distress or interpersonal difficulty, it may fulfill diagnostic criteria from the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Treatment

Treatment is designed to eliminate maladaptive muscle constriction and underlying psychological problems. In Masters and Johnson therapy, the patient uses a graduated series of dilators, which she inserts into her vagina while tensing and relaxing her pelvic muscles. The patient controls the amount of time that the dilator is left in place and the movement of the dilator. Together with her sexual partner, she begins sensate focus and counseling therapy to increase sexual responsiveness, improve communication skills, and resolve any underlying conflicts.

Some physical therapists specialize in teaching women pelvic floor exercises that may decrease perineal muscle constriction.

Kaplan therapy also uses progressive insertion of dilators or fingers (in vivo or desensitization therapy), with behavior therapy (imagining vaginal penetration until it can be tolerated) and, if needed, psychoanalysis, psycho-dynamic psychotherapy, and hypnosis. Practitioners of both therapies claim a 100% cure rate.

Special considerations

- Because a pelvic examination may be painful for the patient with vaginismus, proceed gradually, at the patient's own pace. Support her throughout the pelvic examination, explaining each step before it's done. Encourage her to verbalize her feelings, and take plenty of time to answer her questions.
- Teach the patient about the anatomy and physiology of the reproductive system, contraception, and human sexual response. This can be done quite naturally during the pelvic examination.

- Ask if the patient is taking medications that may affect her sexual response, such as antihypertensives, tranquilizers, or steroids. If she has insufficient lubrication for intercourse, tell her about lubricating gels and creams.

Erectile disorder

Erectile disorder, or impotence, refers to a male's inability to attain or maintain penile erection sufficient to complete intercourse. The patient with primary impotence has never achieved a sufficient erection; secondary impotence, which is more common and less serious than the primary form, implies that, despite present inability, the patient has succeeded in completing intercourse in the past.

Transient periods of impotence aren't considered dysfunction and probably occur in half of adult males. Erectile disorder affects all age-groups but increases in frequency with age. The prognosis depends on the severity and duration of impotence and the underlying cause.

Causes and incidence

Statistics indicate an organic basis for erectile dysfunction in 20% to 50% of men who have this disorder. In some patients, psychogenic and organic factors coexist, making isolation of the primary cause difficult.

Psychogenic causes may be intrapersonal, reflecting personal sexual anxieties, or interpersonal, reflecting a disturbed sexual relationship. Intrapersonal factors generally involve guilt, fear, depression, or feelings of inadequacy resulting from previous traumatic sexual experience, rejection by parents or peers, exaggerated religious orthodoxy, abnormal mother-son intimacy, or homosexual experiences. Interpersonal factors may stem from differences in sexual preferences between partners, lack of communication, insufficient knowledge of sexual function, or nonsexual personal conflicts. Situational impotence, a temporary condition, may develop in response to stress, as in performance anxiety.

Organic causes may include chronic diseases, such as cardiopulmonary disease, diabetes, multiple sclerosis, or renal failure; spinal cord trauma; complications of surgery; drug- or alcohol-induced dysfunction; and, rarely, genital anomalies or central nervous system defects. Many drugs, including most antidepressants, affect sexual function.

Erection problems are common in adult men, with almost all men experiencing occasional difficulty getting or maintaining an erection.

Signs and symptoms

Secondary erectile disorder is classified as follows:

- *Partial*—The patient is unable to achieve a full erection.
- *Intermittent*—The patient is sometimes potent with the same partner.
- *Selective*—The patient is potent only with certain females.

Some men lose erectile function suddenly; others lose it gradually. If the cause isn't organic, erection may still be achieved through masturbation.

Patients with psychogenic impotence may appear anxious, with sweating and palpitations, or may lose interest in sexual activity. Patients with psychogenic or druginduced impotence may suffer severe depression, which may cause the impotence or result from it.

Diagnosis

A detailed sexual history helps differentiate between organic and psychogenic factors and between primary and secondary impotence. Questions should include: Does the patient have intermittent, selective, nocturnal, or early-morning erections? Can he achieve erections through other sexual activity? When did his problem begin, and what was his life situation at that time? Did erectile problems occur suddenly or gradually? Is he taking large quantities of prescription or nonprescription drugs?

Diagnosis must rule out chronic diseases, such as diabetes and other vascular, neurologic, or urogenital problems.

When the disorder causes marked distress or interpersonal difficulty, it may fulfill diagnostic criteria from the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Procedures used to differentiate between organic and nonorganic causes of erectile disorder include noninvasive tests, such as monitoring nocturnal penile tumescence, blood pressure measurements in the penis with a Doppler ultrasound, and measuring pudendal nerve latency. Laboratory tests include glucose tolerance tests, plasma hormone assays, liver and thyroid function tests, and prolactin and follicle stimulating hormone levels. Invasive diagnostic studies include penile arteriography and dynamic infusion cavernosonography.

Treatment

Sex therapy, which should include both partners, may effectively cure psychogenic impotence. The course and content of such therapy depend on the specific cause of the dysfunction and the nature of the couple's relationship. Usually, therapy includes sensate focus exercises, which restrict the couple's sexual activity and encourage them to become more attuned to the physical sensations of touching. Sex therapy also includes improving verbal communication skills, eliminating unreasonable guilt, and reevaluating attitudes toward sex and sexual roles.

Treatment of organic impotence focuses on reversing the cause, if possible. If not, psychological counseling may help the couple deal realistically with their situation and explore alternatives for sexual expression. Certain patients suffering from organic impotence may benefit from surgically inserted inflatable or noninflatable penile implants. The drug sildenafil (Viagra, Revatio) is also effective for treating erectile dysfunction and is an alternative to surgery for many men.

Special considerations

- When you identify a patient with impotence or with a condition that may cause impotence, help him feel comfortable about discussing his sexuality. Assess his sexual health during your initial nursing history. When appropriate, refer him for further evaluation or treatment.
- After penile implant surgery, instruct the patient to avoid intercourse until the incision heals, usually in 6 weeks.

To help prevent impotence:

- Promote establishment of responsible health and sex education programs at primary, secondary, and college levels.
- Provide information about resuming sexual activity as part of discharge instructions for patients with conditions that require modification of daily activities. Such patients include those with cardiac disease, diabetes, hypertension, and chronic obstructive pulmonary disease and all postoperative patients.

Premature ejaculation

Premature ejaculation refers to a male's inability to control the ejaculatory reflex during intravaginal containment, resulting in persistently early ejaculation. This common sexual disorder affects all age-groups; however, it's more common in younger males and in college-educated males.

Causes and incidence

Premature ejaculation may result from anxiety and is typically linked to immature sexual experiences. Other psychological factors may include anxiety or guilt regarding sexual intercourse, unconscious fears about the vagina, and negative cultural conditioning.

However, psychological factors aren't always the cause of premature ejaculation because this disorder can occur in emotionally healthy males with stable, positive relationships. Rarely, premature ejaculation may be linked to an underlying degenerative neurologic disorder, such as multiple sclerosis, or an inflammatory process, such as posterior urethritis or prostatitis.

Signs and symptoms

Premature ejaculation may have a devastating psychological impact on some males, who may exhibit signs of severe inadequacy or self-doubt in addition to general anxiety and guilt.

The patient may be unable to prolong foreplay, or he may have prolonged foreplay capacity but ejaculates as soon as intromission occurs. In other cases, however, premature ejaculation may have little or no psychological impact. In such cases, the complaint lies solely with the sexual partner,

who may believe that the male is indifferent to her sexual needs.

Diagnosis

Physical examination and laboratory test results are usually normal because most males with this complaint are quite healthy. However, a detailed sexual history can aid immeasurably in diagnosis. A history of adequate ejaculatory control in the absence of precipitating psychological trauma should suggest an organic cause.

Treatment

Masters and Johnson have developed a highly successful, intensive program synthesizing insight therapy, behavioral techniques, and

experiential sessions involving both sexual partners. The program is designed to help the patient focus on sensations of impending orgasm.

The therapy sessions, which continue for 2 weeks or longer, typically include:

- mutual physical examination, which increases the couple's awareness of anatomy and physiology while reducing shameful feelings about sexual parts of the body
- sensate focus exercises, which allow each partner to caress the other's body, without intercourse, and to focus on the pleasurable sensations of touch
- Semans squeeze technique, which helps the patient gain control of ejaculatory tension by having the woman squeeze his penis, with her thumb on the frenulum and her forefinger and middle finger on the dorsal surface, near the coronal ridge. At the male's direction, she applies and releases pressure every few minutes during a touching exercise to delay ejaculation by keeping the male at an earlier phase of the sexual response cycle.

The stop-and-start technique helps delay ejaculation. With the female in the superior position, this method involves pelvic thrusting until orgasmic sensations start and then stopping and restarting to aid in control of ejaculation. Eventually, the couple is allowed to achieve orgasm.

Special considerations

- Encourage a positive self-image by explaining that premature ejaculation is a common disorder that doesn't reflect on the patient's masculinity.
- Assure the patient that the condition is reversible.
- Refer the patient to appropriate resources for therapy.
- In an attempt to self-treat premature ejaculation, some men may use distraction techniques that can eventually result in secondary erectile disorder.

Gender identity disorders

Sexual disorders that involve gender identity produce persistent feelings of gender discomfort and dissatisfaction. Gender identity is defined as the psychological state reflecting a sense of being male or female. It's based culturally on determined sets of attitude behavior patterns and other attributes usually associated with masculinity or femininity.

Gender identity disorders shouldn't be confused with the more common feelings of inadequacy in fulfilling the expectations normally associated with a particular sex.

Causes and incidence

Current theories about gender identity disorders and their causes suggest a combination of predisposing factors: chromosomal anomaly, hormonal imbalance (occurring particularly during brain formation in utero), and impaired early parent-child bonding and child-rearing practices.

Gender identity disorders may occur in children and adults.

Signs and symptoms

A gender identity disorder may emerge at an early age. A child may express the desire to be—or insist that he or she is—the opposite sex. For example, a male child may express disgust with his genitalia; a female child may wish to be a man when she grows up.

Men with a gender identity disorder may describe a lifelong history of feeling feminine and pursuing feminine activities. Women report similar propensities for opposite-sex activities and discomfort with the female role. For both sexes, the crisis intensifies during puberty.

DIAGNOSING GENDER IDENTITY DISORDERS

The diagnosis of gender identity disorder is confirmed when the patient's symptoms meet the following criteria

established in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision:

- A strong and persistent cross-gender identification (not merely a desire for any perceived cultural advantages of being the other sex).

  In children, the disturbance is manifested by at least four of the following:

  – repeatedly stated desire to be, or insistence that he or she is, the other sex

  – in boys, preference for cross-dressing or simulating female attire; in girls, insistence on wearing only stereotypical masculine clothing

  – strong and persistent preferences for cross-sex roles in make-believe play or persistent fantasies of being the other sex

  – intense desire to participate in the stereotypical games and pastimes of the other sex

  – strong preference for playmates of the other sex.

  In adolescents and adults, the disturbance is manifested by such symptoms as a stated desire to be the other sex, frequent passing as the other sex, desire to live or be treated as the other sex, or the conviction that he or she has the typical feelings and reactions of the other sex.

- Persistent discomfort with his or her sex or sense of inappropriateness in the gender role of that sex.

  In children, the disturbance is manifested by any of the following:

  – in boys, assertion that his penis or testes are disgusting or will disappear or he'd be better off not to have a penis, rejection of rough-and-tumble play,

and rejection of male stereotypical toys, games, and activities

– in girls, rejection of urinating in a sitting position, assertion that she has or will grow a penis, or assertion that she doesn't want to grow breasts or menstruate, or marked aversion toward feminine clothing.

In adolescents and adults, the disturbance is manifested by such symptoms as preoccupation with getting rid of primary and secondary sex characteristics or the belief that he or she was born the wrong sex.

- The disturbance isn't concurrent with a physical intersex condition.
- The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Diagnosis

For specific diagnostic criteria from the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision, see *Diagnosing gender identity disorders*.

Treatment

Individual and family therapy is indicated for childhood gender identity disorders. Individual and couples therapy may help adults cope.

Sex reassignment through hormonal and surgical treatment may be an option for some individuals; however, these treatments are expensive and carry additional risks for cancer (related to hormones) and infection (related to surgery). Severe psychological problems may persist after sex reassignment. Furthermore, the patient's gender disorder may be part of a larger depression and personality disorder pattern.

Approriate psychiatric management, including hospitalization, may be needed if the patient displays the potential for violent behavior, such as suicide or selfmutilation.

Special considerations

- Adopt a nonjudgmental approach in facial expression, tone of voice, and choice of words to convey your acceptance of the person's choices.
- Respect the patient's privacy and sense of modesty, particularly during procedures or examinations.
- Monitor the patient for related or compounded problems, such as suicidal thought or intent, depression, and anxiety.
- As needed, refer the patient to a physician, nurse, psychologist, social worker, or counselor trained in sex therapy.
- As a helpful guideline, inform the patient that the therapist's certification by the American Association of Sex Educators, Counselors, and Therapists or by the Society for Sex Therapy and Research usually ensures quality treatment.

DIAGNOSING PARAPHILIAS

The most commonly diagnosed paraphilias are exhibitionism, fetishism, frotteurism, pedophilia, sexual masochism, sexual sadism, transvestic fetishism, and voyeurism. Criteria for diagnosis are in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision.

Exhibitionism

The person with this paraphilia obtains sexual gratification from publicly exposing his genitalia to others—principally female passersby. The problem occurs

mostly in men (who may achieve erection while exposing themselves and may masturbate to orgasm at the time).

A diagnosed exhibitionist has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors that involve exposing his genitalia to an unsuspecting stranger.

Fetishism

The term *fetish* describes a recurrent and intense sexual arousal from an inanimate object (usually clothing, such as panties or boots) or from nonsexual body parts. The person typically masturbates while holding, rubbing, or smelling the fetish object—or asks a sexual partner to wear the object during a sexual encounter. Fetishism is usually chronic and occurs primarily in men.

A diagnosed fetishist has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors evoked by inanimate objects. The fetish objects aren't restricted to clothing used in cross-dressing or devices designed for tactile genital stimulation.

Frotteurism

The frotteur achieves sexual arousal by touching or rubbing a nonconsenting person. A male frotteur may rub his genitals against a woman's thigh or fondle her breasts. The behavior may occur in crowded places (for example, buses), where it's easier to avoid detection. It's most common between ages 15 and 25.

A diagnosed frotteur has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors involving touching and rubbing against a nonconsenting person.

Pedophilia

The pedophile (almost always a man) is aroused by, and seeks sexual gratification from, children. This urge forms his preferred or exclusive sexual activity. Prepubescent children are common targets, and attraction to girls is more common than attraction to boys. The pedophile may sexually abuse his own children or those of a friend or relative. Rarely, he may abduct a child. Some pedophiles are also attracted to adults.

A diagnosed pedophile has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors involving a prepubescent child or children (usually age 13 or younger). The pedophile is at least age 16 and at least 5 years older than the desired child. (This excludes a person in late adolescence engaged in an ongoing sexual relationship with a child of age 12 or 13.)

Sexual masochism

A sexual masochist achieves sexual gratification by submitting to physical or psychological pain, such as being beaten, tortured, or humiliated.

Infantilism, a form of sexual masochism, is a desire to be treated as a helpless infant, including wearing diapers. A dangerous form of this paraphilia, *sexual hypoxyphilia,* relies on oxygen deprivation to induce sexual arousal. The person uses a noose, mask, plastic bag, or chemical to temporarily reduce cerebral oxygenation. Equipment malfunction or other mistakes can cause accidental death.

A diagnosed sexual masochist has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors involving the act (real, not simulated) of being beaten, humiliated, or otherwise made to suffer.

Sexual sadism

The converse of a sexual masochist, a sadist has recurrent, intense, sexual urges and fantasies that involve inflicting physical or psychological suffering. The sadist derives sexual gratification from this behavior.

A diagnosed sexual sadist has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors involving acts (real, not simulated) that cause another person pain and suffering and that evoke sexual excitement in the sadist.

Transvestic fetishism

The transvestite is a heterosexual man who obtains sexual pleasure from cross-dressing (dressing in women's clothing). He may select a single article of apparel, such as a garter or bra, or he may dress entirely as a woman. This behavior is usually accompanied by masturbation and mental images of other men being attracted to him as a woman.

A diagnosed transvestic fetishist is a heterosexual male who has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors involving cross-dressing.

Voyeurism

The voyeur derives sexual pleasure from looking at sexual objects or situations such as an unsuspecting couple engaged in sexual intercourse. Onset of this disorder, which tends to be chronic, occurs before age 15.

A diagnosed voyeur is a heterosexual male who has had at least 6 months of recurrent, intense, sexually arousing fantasies, urges, or behaviors involving the act of observing an unsuspecting person who's naked, disrobing, or engaging in sexual activity.

Paraphilias

Characterized by a dependence on unusual behaviors or fantasies to achieve sexual excitement, paraphilias are complex psychosexual disorders. The *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision (*DSM-IV-TR*), recognizes eight paraphilias. (See *Diagnosing paraphilias.*) Some paraphilias are considered sex offenses or crimes because they violate social mores or norms. However, everyone has sexual fantasies, and sexual behavior between consenting adults that isn't physically or psychologically harmful isn't considered a paraphilia.

Causes and incidence

The cause of paraphilias is unknown, but multiple contributing factors have been identified. Abnormal hormonal values, neurologic disorders, chromosomal abnormalities, seizure disorders, and dyslexia have been identified as contributing factors. For example, many people with these disorders come from dysfunctional families characterized by isolation and sexual, emotional, or physical abuse. Others suffer from personality or psychoactive substance use disorders.

Signs and symptoms

The patient's history will reveal the particular pattern of abnormal sexual behaviors associated with one of the eight recognized paraphilias.

Diagnosis

The standard diagnostic criteria for paraphilias, published in the *DSM-IV-TR,* include not only specific criteria for each paraphilia but also general features. A paraphiliac has ongoing, intense, sexually arousing fantasies, urges, or behaviors involving various aberrant sexual expressions that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Treatment

Paraphilias require mandatory treatment when the patient's sexual preferences result in socially unacceptable, harmful, or criminal behavior. Depending on the paraphilia, treatment may include combinations of psychotherapy, behavior therapy, surgery, or pharmacotherapy.

Special considerations

- Use a nonjudgmental approach when dealing with the patient.
- Realize that treating such a patient with empathy doesn't threaten your own sexuality.
- Encourage the patient to express his emotions in an appropriate manner.
- As needed, refer the patient to a physician, nurse, psychologist, social worker, or counselor trained in sex therapy.
- As a helpful guideline, inform the patient that a therapist's certification by the American Association of Sex Educators, Counselors, and Therapists or by the Society for Sex Therapy and Research usually ensures quality treatment.

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