



Final Study Guide NR509

Advanced Physical Assessment (Chamberlain University)

Final Study Guide

Chapter 1 - Foundations for Clinical Proficiency

-Know what should be listed under adult illnesses in health history (p.10)

Medical, Surgical, OBGYN, Psychiatric

-Know what is listed under present illness (p.9)

Problems prompting the patients visit, including the onset of the problem, the setting in which it developed, its manifestations, and any treatments to date

-Know what makes up the health history (subjective) (p.7)

Identifying data and source of the history; reliability

Chief complaint(s)

Present Illness

Past history

Family history

Personal and social history

Review of Systems

-Know how to prioritize patient complaints (p.37)

List most active & serious problems first and their date of onset

Problems can be symptoms, signs, past health events such as a hospital admission or surgery or diagnoses

-Be able to figure out what is missing in an HPI (p.9)

O.L.D.C.A.R.T

-Know what subjective information is (p.6)

What patient tells you

-Know what objective information is (p.6)

Examination findings, vital signs, laboratory data

-Know the c-sections should be listed in surgeries (p.10)

Surgical history- make sure you include date, indication, type of surgery.

-Subjective info (ROS) (p.12)

Goes under the review of systems

Chapter 2 - Evaluating Clinical Evidence

- Evaluating Clinical Evidence
- Critical Thinking and Clinical Reasoning
- Differential Diagnoses
- Pathological and Physiological Processes
- Problem List
- Problem Prioritization

Chapter 3 - Interviewing and the Health History

-Know how to get a patient to open up when they seem upset (p.72)

Effective reassurance-identifying and acknowledging patients feelings

Meaningful reassurance-deal openly with concerns

Validate the legitimacy of his or her emotional experience

Moving closer or making physical contact

-Know that you need permission of the patient to carry out the visit if someone is in the room (p.75)

Whenever visitors are present, *you are obligated to maintain the patients confidentiality*

-Know how to make a pelvic exam less intimidating (p.76)

Avoid interviewing patient when she is already positioned for a pelvic exam

-Know that if a patient returns from a country with malaria you still need to be selective of which patients you screen for malaria (p.66) Review page

-Where to sit when interpreter in the room (p.90)

Arrange seating so that you have eye contact with the patient, have the interpreter sit close or behind you (keeps you from turning your head back and forth)

-Know the order of meeting a patient and conducting an interview (p.73)

The Sequence and Context of the Interview

Preparation, Sequence, and Cultural Context

Preparation: Reviewing the clinical record. Setting goals for the interview. Reviewing your clinical behavior and appearance. Adjusting the environment.

The Sequence of the Interview: Greeting the patient and establishing rapport. Establishing the agenda for the interview. Inviting the patient's story. Exploring the patient's perspective. Identifying and responding to emotional cues. Expanding and clarifying the patient's story. Generating and testing diagnostic hypotheses. Sharing the treatment plan. Closing the interview and the visit. Taking time for self-reflection.

The Cultural Context of the Interview: Demonstrating cultural humility—a changing paradigm.

Chapter 4 - Beginning the Physical Examination: General Survey, Vital Signs, and Pain

-Know what can cause falsely high BP (p.127)

Cuff too small BP will read high; cuff too large BP will read low on small arm and high on large arm
Brachial artery below heart, BP will be higher, if brachial artery is above heart, reading will be lower

-Know what is included in constitutional symptoms (p.112)

Fatigue, weakness, fever/chills, night sweats, weight changes or pain

-BMI interpretation (p.122)

The BMI incorporates estimated but more accurate measures of body fat than weight alone

Chapter 6 - The Skin, Hair, and Nails

-Know that cherry angiomas are benign (p.196 & 205)

Benign tumors that result from overgrowth of capillaries

-Know risk factors of melanoma (p.177)

- Personal or family history of previous melanoma^{4,7-9}
- ≥ 50 common moles
- Atypical or large moles, especially if dysplastic
- Red or light hair
- *Solar lentigines* (acquired brown macules on sun-exposed areas)
- Freckles (inherited brown macules)
- Ultraviolet radiation from heavy sun exposure, sunlamps, or tanning booths
- Light eye or skin color, especially skin that freckles or burns easily
- Severe blistering sunburns in childhood
- Immunosuppression from human immunodeficiency virus (HIV) or from chemotherapy
- Personal history of nonmelanoma skin cancer

-Know what acanthosis nigricans can clue into (p.207)

Diabetes

-Know labs to check with vitiligo (p.191)

Thyroid panel/CBC

-Know how psoriasis presents (p.192)

Scattered erythematous; raised on skin, over 1 cm; plaque- Raised papule- rough, dry, silver, grey. Found most often over joints.

-Know what onychomycosis looks like (p.212)



-Pityriasis Rosea (p.193)- herald spot w/bullseye like papule with branches emanating from it, occur on back, chest. Red, raised.



Multiple round to oval scaling violaceous **plaques** on abdomen and back; *pityriasis rosea*

-Herpes Zoster (p.193)



Grouped 2–5-mm **vesicles** on erythematous base on left upper abdomen and trunk in a dermatomal distribution that does not cross the midline; *herpes zoster* or “shingles”

-Systemic lupus Erythematosus (p.208)

Malar erythema (mid cheeks, spans bridge of nose), relative sparing of nasolabial folds, periungual erythema, interphalangeal erythema

-Tinea (p.176, 183, 210)

Hair breaks along the shaft; dry and fine; fungal infection; Ringworm. Tinea Versicolor: smooth, non-blanching lesion.

-Lyme Disease

Rash, often in Red Bullseye pattern (*erythema migrans*); caused by tick bite. A/W flu-like symptoms, fever, HA, fatigue

-Cellulitis (p.213)

Inspect ulcers for signs of infection

Chapter 7 - The Head and Neck

-Know how retinal detachment presents (p.217)

Sudden, painless, unilateral vision loss

-Know what cranial nerve you're assessing when checking lateral gaze (p.237)

Cranial nerve VI (6) Abducens

-Know what conditions do not have red reflexes (p.239)

Cataracts, detached retina, the vitreous, artificial eye or retinoblastoma in children

-Know how optic neuritis presents (p.217)

Sudden vision loss, unilateral, painful; associated with multiple sclerosis

-Know what yellow sclera indicates (p.234)

Jaundice

-Know how otosclerosis presents with Weber and Rinne test (p.289)

Conductive loss of hearing

| | |
|--|--|
| Weber Test (in Unilateral Hearing Loss) | Tuning fork at vertex Sound lateralizes to <i>impaired ear</i> —room noise not well heard, so detection of vibrations <i>improves</i> . |
| Rinne Test | Tuning fork at external auditory meatus; then on mastoid bone BC longer than or equal to AC ($BC \geq AC$). While air conduction through the external or middle ear is impaired, vibrations through bone bypass the problem to reach the cochlea. |

-Know how to interpret visual acuity results (p.231)

First number is distance of patient from chart (20 feet)

Second, distance which a normal eye can read line

Bigger the second number, the worse the vision

-Know what visual acuity means 20/100 (p.231)

At 20 ft. the patient can read a print that a person with normal vision can read at 100ft

-Know what can cause epistaxis (p.220)

Trauma (nose picking), inflammation, drying, tumors, and foreign bodies

-Know the signs of otitis externa (swimmer's ear) (p.245)

Painful movement of the tragus (tug test)

-Know red flags for headaches (p.216)

- Progressively frequent or severe over a 3-month period
- Sudden onset like a "thunderclap" or "the worst headache of my life"
- New onset after age 50 years
- Aggravated or relieved by change in position
- Precipitated by Valsalva maneuver or exertion
- Associated symptoms of fever, night sweats, or weight loss
- Presence of cancer, HIV infection, or pregnancy
- Recent head trauma
- Change in pattern from past headaches
- Lack of a similar headache in the past
- Associated papilledema, neck stiffness, or focal neurologic deficits

-Know what cotton wool patches look like (p.241)

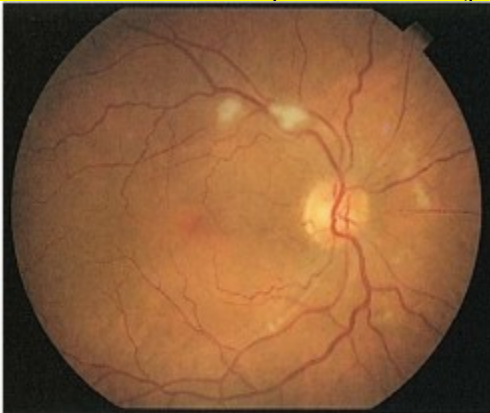
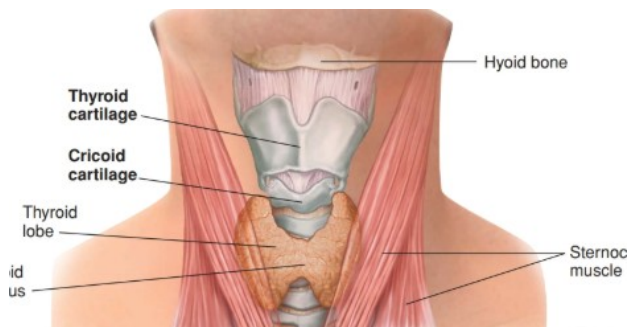


FIGURE 7-32. Cotton-wool patches.

-Know how a subconjunctival hemorrhage presents (p.270)

Leakage of outside blood vessels in the eye, absent of pain; vision not affected

-Know where the cricoid cartilage is (p.258)



-Know where lymph nodes should be with strep

Anterior cervical for strep and posterior cervical for mono

-Know what chalazion is (p.275)



Chalazion

A subacute nontender, usually painless nodule caused by a blocked meibomian gland. May become acutely inflamed but, unlike a sty, usually points inside the lid rather than on the lid margin.

-Know what a retracted tympanic membrane with effusion looks like (p.288)



-Glaucoma (p.270)

Severe, aching, deep pain; decreased vision; pupil dilated/fixed



Chapter 8 - The Thorax and Lungs

-Know the signs of respiratory distress (p.318)

tachypnea, cyanosis or pallor, stridor, contraction of accessory muscles

-Know the signs of pneumonia (p.322-339)

Dullness replaces resonance; dyspnea, pleuritic pain, cough, fever; localized bronchophony/egophony

-Know the signs of asthma (p.326 & 334)

| | |
|--|--|
| Cough, at times with thick mucoid sputum, especially near end of an attack | Episodic wheezing and dyspnea, but cough may occur alone. Often with a history of allergies. |
|--|--|

-Know to consider angina pectoris as a differential with chest pain (p.310 & 330)

Myocardium; clenched fist over the sternum

Chapter 9 - The Cardiovascular System

-Know how to distinguish jugular venous distention vs carotid pulse (p.377)

| Internal Jugular Pulsations | Carotid Pulsations |
|---|---|
| Rarely palpable | Palpable |
| Soft biphasic undulating quality, usually with two elevations and <i>characteristic inward deflection</i> (x descent) | A more vigorous thrust with a <i>single outward component</i> |
| Pulsations eliminated by light pressure on the vein(s) just above the sternal end of the clavicle | Pulsations not eliminated by pressure on veins at sternal end of clavicle |
| Height of pulsations changes with position, normally dropping as the patient becomes more upright | Height of pulsations unchanged by position |
| Height of pulsations usually falls with inspiration | Height of pulsations not affected by inspiration |

-Know what atrium or ventricle you feel when you palpate the chest (p.385-389)

Right ventricle occupies most of anterior cardiac surface

-Know how to listen for aortic regurgitation (p.392)

Ask the patient to sit up, lean forward, exhale completely, and briefly stop breathing after expiration. Pressing the diaphragm of your stethoscope on the chest, listen along the left sternal border and at the apex, pausing periodically so the patient may breathe

-Know what valve you are listening to when you listen to the apex of the heart (p.391)

Mitral

-Know what position to have pt in to listen for mitral stenosis (p.391)

Left lateral decubitus position

-Know what to ask in regards to cardiovascular ROS (p.355-358)

Chest pain, palpitations, SOB, swelling (edema), syncope

-Know what causes and increased jugular venous pressure (p.377)

Heart failure, tricuspid stenosis, chronic pulmonary hypertension, superior vena cava obstruction, cardiac tamponade, and constrictive pericarditis

-Know what causes a split S2 (p.349)

During inspiration the right heart filling time is increased which increased right ventricular stroke volume and duration of right ventricular ejection. This delays closure of pulmonic valve, splitting S2 into 2 audible sounds

-Know what causes an S3 heart sound (p.348)

ventricular compliance

Chapter 12 - The Peripheral Vascular System

-Know the signs of thrombophlebitis (p.525)

Redness, swelling, warmth

-Know when to order an ABI (p.519)

Symptomatic LE PAD; Risk factors: age 50 or older with hx of DM or smoking; leg symptoms w/exertion; non-healing wounds

-Know the risk factors for PAD (p.509)

Smoking, DM, obesity, hypertension, hld, over 50, family hx

-Know what a bounding pulse is on a number scale 0-3 (p.522)

Bounding = 3+

-Know what an ulcer due to venous insufficiency looks like (p.525 & 538)



-Know why venous insufficiency causes edema, swelling and ulceration (p.533)

Chronic obstruction and incompetent valves in the deep venous system.

-Know that the Buerger test is for chronic arterial insufficiency (p.530 & 531): patient's LE color changes with first raising the LE while supine, then having patient sit up. Normal= return of pinkness in <10 sec, filling of veins in <15 sec



FIGURE 12-32. The Buerger test—legs when sitting.

Chapter 16 - The Musculoskeletal System

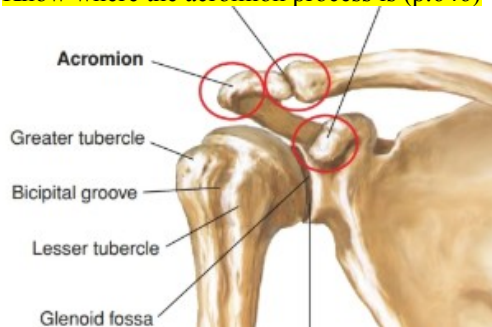
-Know the sources of joint pain (p.630)

Joint pain: articular or extra-articular, acute or chronic, inflammatory or noninflammatory, localized or diffuse Joint pain: associated constitutional symptoms and systemic manifestations from other organ systems

-Know what causes saddle numbness and urinary retention (p 635)

Cauda equina syndrome

-Know where the acromion process is (p.646)

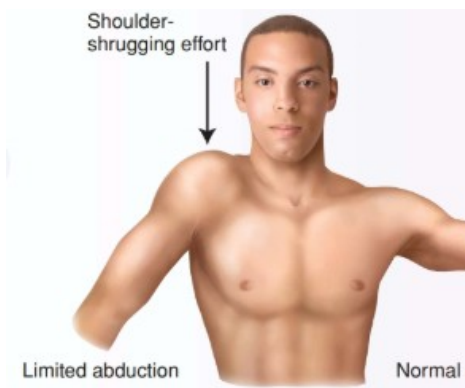


-Know the signs of degenerative pain (p.696)

Weakness, fatigue, malaise

-Know how a rotator cuff tear presents (p.655 & 700)

Weakness during drop arm test



-Know what joints are condylar (p.629)

| | | | |
|-----------------|-------------------|---|--------------------------------|
| Condylar | Convex or concave | Movement of two articulating surfaces not dissociable | Knee; temporo-mandibular joint |
|-----------------|-------------------|---|--------------------------------|

-Know how RA presents (p.703)

Acute: tender, painful, stiff joints usually with symmetric involvement

Chronic: swelling and thickening of joints. ROM limited; *swan neck* deformities

-Know where pain from lateral epicondylitis presents (p.702)

Pain and tenderness develop 1 cm distal to the lateral epicondyle and possibly in the extensor muscles closest

Chapter 17 - The Nervous System

-Know what the word obtunded means (p.769)

Opens eyes and looks at you but responds slowly and is somewhat confused. Alertness and interest in the environment are decreased

-Know how to check for nystagmus (p.737 & 785)

Gait ataxia, dysarthria (increases with retinal fixation), vestibular (decreases with retinal fixation), internuclear ophthalmoplegia; identified by involuntary jerking eye movement

-Know what absence seizures are (p.781)

Sudden brief lapse of consciousness with momentary blinking, staring or movements of the lips and hands but no falling. Typical-less than 10 sec and stops abruptly; atypical-may last more than 10 sec.

-Know the physical signs of meningitis (p.765)

Neck stiffness with resistance to flexion (won't be able to touch chin to chest). Inflammation in the subarachnoid space causes resistance to movement that stretches the spinal nerves (neck flexion), the femoral nerve (Brudzinski sign), and the sciatic nerve (Kernig sign)

Brudzinski Sign. As you flex the neck, watch the hips and knees in reaction to your maneuver. Normally they should remain relaxed and motionless.

Kernig Sign. Flex the patient's leg at both the hip and the knee, and then slowly extend the leg and straighten the knee. Discomfort behind the knee during full extension is normal but should not produce pain.

-Know signs of subarachnoid hemorrhage (p.216 & 268)

Severe and sudden headache; N/V; neck stiffness with resistance to flexion

-Know which cranial nerve you assess when you touch the soft palate and view of the uvula (p.257)

Cranial nerve X (10) Vagus

-Know signs of increased intracranial pressure (p.280)

Papilledema of optic disc; headache, blurred vision, vomiting, change in LOC, weakness

-Olfactory CN I (p.736)

-Accessory CN XI (p.740)- test shoulder shrug against resistance

-Know what cranial nerve you're assessing when checking lateral gaze (p.716)

Cranial nerve VI (6) Abducens

-Vasovagal syncope causes (p.778)

Reflex withdrawal of sympathetic tone and increased vagal tone causing drop in BP and HR

-Pronator Drift: hold hands out, watch for drifting downwards or pronation over time; indicates an upper motor neuron issue (ie stroke or spinal cord problem)

Chapter 5 - Behavior and Mental Status

-Know what perseveration is when talking about using words repeatedly (p.162)

Variations and abnormalities in thought processes

Persistent repetition of words or ideas

Occurs in schizophrenia and other psychotic disorders

-**Know that suicide/depression assessment tools should be used** and if patient scores positive, ask if there is a plan, ask pt to make pact to not commit suicide

-**Functional Syndrome:** several related syndromes characterized by symptoms, suffering, and disability with little demonstrable tissue abnormalities. Includes IBS, fibromyalgia, chronic fatigue, TMJ disorder, and multiple chemical sensitivity.

-**Speech Patterns:** Disorders of speech fall into three groups affecting: (1) phonation of the voice, (2) the articulation of words, and (3) the production and comprehension of language.

-**Aphonia** refers to a loss of voice that accompanies disease affecting the larynx or its nerve supply.

-**Dysphonia** refers to less severe impairment in the volume, quality, or pitch of the voice. For example, a person may be hoarse or only able to speak in a whisper. Causes include laryngitis, laryngeal tumors, and unilateral vocal cord paralysis (CN X).

-**Dysarthria** refers to a defect in the muscular control of the speech apparatus (lips, tongue, palate, or pharynx). Words may be nasal, slurred, or indistinct, but the central symbolic aspect of language remains intact. Causes include motor lesions of the CNS or PNS, parkinsonism, and cerebellar disease.

-**Aphasia** refers to a disorder in producing or understanding language. It is often caused by lesions in the dominant cerebral hemisphere, usually the left.

Variations and Abnormalities in Thought Processes (continued)

| | |
|-----------------|---|
| Flight of ideas | An almost continuous flow of accelerated speech with abrupt changes from one topic to the next. Changes are based on understandable associations, plays on words, or distracting stimuli, but ideas are not well connected. |
| Neologisms | Invented or distorted words, or words with new and highly idiosyncratic meanings. |
| Incoherence | Speech that is incomprehensible and illogical, with lack of meaningful connections, abrupt changes in topic, or disordered grammar or word use. Flight of ideas, when severe, may produce incoherence. |
| Blocking | Sudden interruption of speech in midsentence or before the idea is completed, attributed to "losing the thought." Blocking occurs in normal people. |
| Confabulation | Fabrication of facts or events in response to questions, to fill in the gaps from impaired memory. |
| Perseveration | Persistent repetition of words or ideas. |
| Echolalia | Repetition of the words and phrases of others. |
| Clanging | Speech with choice of words based on sound, rather than meaning, as in rhyming and punning. For example, "Look at my eyes and nose, wise eyes and rosy nose. Two to one, the eyes have it!" |

-**Generalized Anxiety Disorder:** Excessive worry persisting over a 6-month period suggests a possible anxiety disorder, one of the most prevalent psychiatric conditions in the United States, with a lifetime prevalence of approximately 3%.

-**Screening for depression:** For patients with depression or thought disorders such as schizophrenia, take a careful history of their symptoms and course of illness. Watch for mood changes or symptoms such as fatigue, unusual tearfulness, appetite or weight changes, insomnia, and vague somatic complaints. Two validated screening questions for depression are: "Over the past 2 weeks, have you felt down, depressed, or hope-less?" and "Over the past 2 weeks, have you felt little interest or pleasure in doing things?"⁸⁵ If the patient seems depressed, always ask about suicide: "Have you ever thought about hurting yourself or ending your life?" As with chest pain, you must evaluate severity—both depression and angina are potentially lethal.

-High yield screening questions for depression include: Over the past 2 weeks, have you felt down, depressed, or hopeless? Over the past 2 weeks, have you felt little interest or pleasure in doing things (anhedonia)?

-A positive test response has a sensitivity of 83% and a specificity of 92% for detecting major depression.⁴⁵ All positive screening tests warrant full diagnostic inter-views. Failure to diagnose depression can have fatal consequences—the presence of an affective disorder is associated with an 11-fold increased risk for suicide.

-**Depressive Disorders:** Depressive and bipolar disorders affect over 9% of the U.S. population. About 16 million adult Americans, or almost 7%, have major depression, often with coexisting anxiety disorders and substance abuse. Depression is nearly twice as common in women as men; the prevalence of postpartum depression is 7% to 13%. Depression frequently accompanies chronic medical illness. High-risk patients may have subtle early signs of depression, including low self-esteem, loss of pleasure in daily activities (anhedonia), sleep disorders, and difficulty concentrating or making decisions.

-**Schizophrenia:**

-**Mental status exam:**

| Level of Consciousness | Alertness or State of Awareness of the Environment |
|-----------------------------------|--|
| <i>Affect</i> | A fluctuating pattern of observable behaviors that expresses subjective feelings or emotions through tone of voice, facial expression, and demeanor. Disturbed affect may be flat, blunted, labile, or inappropriate. |
| <i>Mood</i> | A more pervasive and sustained emotion that colors the person's perception of the world. (Affect is to mood as weather is to climate.) Mood may be euthymic (in the normal range), elevated, or dysphoric (unpleasant, possibly as sad, anxious, or irritable), for example. |
| <i>Language</i> | A complex symbolic system for expressing, receiving, and comprehending words; as with consciousness, attention, and memory, language is essential for assessing other mental functions |
| <i>Higher cognitive functions</i> | Assessed by vocabulary, fund of information, abstract thinking, calculations, construction of objects that have two or three dimensions |

Terminology: The Mental Status Examination

| Level of Consciousness | Alertness or State of Awareness of the Environment |
|--------------------------|---|
| <i>Attention</i> | The ability to focus or concentrate over time on a particular stimulus or activity—an inattentive person is easily distractible and may have difficulty giving a history or responding to questions. |
| <i>Memory</i> | The process of registering or recording information, tested by asking for immediate repetition of material, followed by storage or retention of information. Recent or short-term memory covers minutes, hours, or days; remote or long-term memory refers to intervals of years. |
| <i>Orientation</i> | Awareness of personal identity, place, and time; requires both memory and attention |
| <i>Perceptions</i> | Sensory awareness of objects in the environment and their interrelationships (external stimuli); also refers to internal stimuli such as dreams or hallucinations. |
| <i>Thought processes</i> | The logic, coherence, and relevance of the patient's thought as it leads to selected goals; how people think |
| <i>Thought content</i> | What the patient thinks about, including level of insight and judgment |
| <i>Insight</i> | Awareness that symptoms or disturbed behaviors are normal or abnormal; for example, distinguishing between daydreams and hallucinations that seem real. |
| <i>Judgment</i> | Process of comparing and evaluating alternatives when deciding on a course of action; reflects values that may or may not be based on reality and social conventions or norms |

[continued]

Chapter 10 - The Breasts and Axillae

-When performing a breast exam, know what abnormal masses should do when the arm moves (p.444)

Fibroadenoma: very mobile

Cysts: Mobile

Cancer: May be fixed to skin or underline tissues; may cause dimpling of skin or retraction when arms are lifted over head or hands are pressed against hips

-Know that a high proportion of breast masses are noted during self-exams (p.441)

-Know the characteristics of a breast cyst (p.423)

Usually soft to firm, round, mobile and often tender. Most common between the ages of 25-50

-Know the risk factors for breast cancer (pg. 425) (age is the largest factor)

***Age: (65+ vs <65 years although risk increases across all ages until age 80)

Biopsy- confirmed atypical hyperplasia

Certain inherited genetic mutations for breast cancer (BRCA1 and/or BRCA2)

Ductal carcinoma in situ

Lobular carcinoma in situ

Personal hx of early onset breast cancer (<40 years)

Two or more 1st degree relatives diagnosed with breast cancer at an early age

Late age of first full term pregnancy

Late menopause

Breast tissue density

Modifiable risk factors: breastfeeding for less than 1 year, postmenopausal obesity, use of HRT, cigarette smoking, alcohol ingestion, physical inactivity, and type of contraception.

-Know that age is a big risk factor for breast cancer (p.425)

The most important risk factor for breast cancer is age.

-Know the best way to examine the lateral portion of the breast (pg. 437)

Ask the patient to roll onto the opposite hip, placing her hand on her forehead but keeping the shoulders pressed against the bed or examining table. This flattens the lateral breast tissue. Begin palpation in the axilla, moving in a straight line down to the bra line, then move the fingers medially and palpate in a vertical strip up the chest to the clavicle. Continue in vertical overlapping strips until you reach the nipple, then reposition the patient to flatten the medial portion of the breast.

-Know which lymph node group is most commonly involved in breast ca (p 441)

Central nodes (axillary)

Chapter 11 - The Abdomen

-Know where pain is located in Pancreatitis (p.488)

| | | | |
|--|--|---|--------------------------|
| Acute Pancreatitis ^{7,9} | Intrapancreatic trypsinogen activation to trypsin and other enzymes, resulting in autodigestion and inflammation of the pancreas | Epigastric, may radiate straight to the back or other areas of the abdomen; 20% with severe sequelae of organ failure | Usually steady |
| Chronic Pancreatitis | Irreversible destruction of the pancreatic parenchyma from recurrent inflammation of either large ducts or small ducts | Epigastric, radiating to the back | Severe, persistent, deep |

-Know where pain is with diverticulitis (p488,489)

Left lower quadrant

-Know where pain is with appendicitis (p457,488)

RLQ pain or pain that migrates from the periumbilical region, combined with abdominal wall rigidity on palpation is suspicious for appendicitis.

-Know how Hepatitis A is transmitted (p.466)

Transmission of hepatitis A virus (HAV) is through a fecal-oral route. Fecal shedding followed by poor hand washing contaminated water and foods, leads to infection of household and sexual contacts. Infected children are often asymptomatic, contributing to the spread of infection.

-Know signs of peritonitis (p.486)

When tender area is palpated for guarding, early voluntary guarding may be replaced by involuntary muscular rigidity and signs of peritoneal inflammation. There may also be RLQ pain on quick withdrawal or deferred rebound tenderness. See findings suggestive of peritonitis secondary to possible appendicitis pg. 485-486)

-Know different forms of incontinence (p.497-498)

| Problem | Mechanisms | Symptoms | Physical Signs |
|--|---|---|--|
| Stress Incontinence The urethral sphincter is weakened so that transient increases in intra-abdominal pressure raise the bladder pressure to levels that exceed urethral resistance. | In women, pelvic floor weakness and inadequate muscular and ligamentous support of the bladder neck and proximal urethra change the angle between the bladder and the urethra (see Chapter 14, pp. 592-593). Causes include childbirth and surgery. Local conditions affecting the internal urethral sphincter, such as postmenopausal atrophy of the mucosa and urethral infection, may also contribute. In men, stress incontinence may follow prostate surgery. | Momentary leakage of small amounts of urine with coughing, laughing, and sneezing while the person is in an upright position. Urine loss is unrelated to a conscious urge to urinate. | Stress incontinence may be demonstrable, especially if the patient is examined before voiding and in a standing position. Atrophic vaginitis may be evident. Bladder distention is absent. |

Urge Incontinence

Detrusor contractions are stronger than normal and overcome the normal urethral resistance. The bladder is typically *small*.

Decreased cortical inhibition of detrusor contractions from stroke, brain tumor, dementia, and lesions of the spinal cord above the sacral level.

Hyperexcitability of sensory pathways, as in bladder infections, tumors, and fecal impaction.

Deconditioning of voiding reflexes, as in frequent voluntary voiding at low bladder volumes.

Involuntary urine loss preceded by an urge to void. The volume tends to be moderate.

Urgency, frequency, and nocturia with small to moderate volumes. If acute inflammation is present, pain on urination.

Possibly "pseudo-stress incontinence"—voiding 10–20 sec after stresses such as a change of position, going up- or downstairs, and possibly coughing, laughing, or sneezing.

The small bladder is not detectable on abdominal examination.

When cortical inhibition is decreased, mental deficits or motor signs of central nervous system disease are often present.

When sensory pathways are hyperexcitable, signs of local pelvic problems or a fecal impaction may be present.

Overflow Incontinence

Detrusor contractions are insufficient to overcome urethral resistance, causing urinary retention. The bladder is typically flaccid and *large*, even after an effort to void.

Obstruction of the bladder outlet, as in *benign prostatic hyperplasia* or tumor.

Weakness of the detrusor muscle associated with peripheral nerve disease at S2–4 level.

Impaired bladder sensation that interrupts the reflex arc, as in diabetic neuropathy.

When intravesicular pressure overcomes urethral resistance, continuous dripping or dribbling incontinence ensues.

Decreased force of the urinary stream.

Prior symptoms of partial urinary obstruction or other symptoms of peripheral nerve disease may be present.

Examination often reveals an enlarged, sometimes tender, bladder. Other signs include prostatic enlargement, motor signs of peripheral nerve disease, a decrease in sensation (including perineal sensation), and diminished to absent reflexes.

Functional Incontinence

The patient is functionally unable to reach the toilet in time because of impaired health or environmental conditions.

Problems in mobility resulting from weakness, arthritis, poor vision, or other conditions. Environmental factors such as an unfamiliar setting, distant bathroom facilities, bed rails, or physical restraints.

Incontinence on the way to the toilet or only in the early morning.

The bladder is not detectable on examination. Look for physical or environmental clues as the likely cause.

Incontinence Secondary to Medications

Drugs may contribute to any type of incontinence listed.

Sedatives, tranquilizers, anticholinergics, sympathetic blockers, and potent diuretics.

Variable. A careful history and chart review are important.

Variable.

-Know what causes dark, blood emesis (p.458)

Hematemesis may accompany esophageal or gastric varices, Mallory-Weiss tears, or **peptic ulcer disease**. **Epistaxis** can present as hematemesis due to swallowing blood from nasopharynx.

-Know the differentials for epigastric pain (pg. 455)

GERD, pancreatitis, and perforated ulcers, myocardial ischemia

-Know what to do if you feel an abdominal mass (pg. 487)

Occasionally there are masses in the abdominal wall rather than inside the abdominal cavity. Ask the patient either to raise the head and shoulders or to strain down, thus tightening the abdominal muscles. Feel for the mass again.

-Modification of assessment for age:

-GERD: Complaints of heartburn, dysphagia, regurgitation, and epigastric pain. If patients report heartburn and regurgitation together more than once a week, the accuracy of diagnosing GERD is over 90%. These symptoms or mucosal damage on endoscopy are the diagnostic criteria for GERD. Risk factors include reduced salivary flow, which prolongs acid clearance by damping action of the bicarbonate buffer; obesity; delayed gastric emptying; selected medications; and hiatal hernia.

-Some patients with GERD have atypical respiratory symptoms such as chest pain, cough, wheezing, and aspiration pneumonia. Others complain of pharyngeal symptoms, such as hoarseness chronic sore throat, and laryngitis.

-IBS: A functional syndrome with a cluster of symptoms, no found cause. Symptoms include: Intermittent pain for 12 weeks of the preceding 12 months with relief from defecation, change in frequency of bowel movements, or change in form of stool (loose, watery, pellet-like), linked to luminal and mucosal irritants that alter motility, secretion, and pain sensitivity.

-Ulcerative colitis: *Caused by:* Mucosal inflammation typically extending proximally from the rectum (proctitis) to varying lengths of the colon (colitis to pancolitis), with microulcerations and, if chronic, inflammatory polyps.

-*Stool:* Frequent, watery, often containing blood

-*Timing:* Onset typically abrupt; often re-current, persisting, and may awaken at night

-*Associated Symptoms:* Cramping, with urgency, tenesmus; fever, fatigue, weakness; abdominal pain if complicated by toxic megacolon; may include episcleritis, uveitis, arthritis, erythema nodosum

-*Population at Risk:* Often young adults, Ashkenazi Jewish descendants; linked to altered CD4+ T-cell Th2 response; increases risk of colon cancer

-Know the sequence of the abdomen (p.22)

Inspect, auscultate, percuss, palpate

Chapter 13 - Male Genitalia and Hernias

-Know that in a 47 year old man, erectile dysfunction is usually psychologic rather than testosterone (p.546)

Erectile dysfunction may be from psychogenic causes, especially if early morning erection is preserved. Can also reflect decreased testosterone, decreased flow, impaired neural innervation, and DM.

-Know how syphilis presents genitally (p.557)



Primary Syphilis

- *Appearance:* Small red papule that becomes a *chancre*, a painless erosion up to 2 cm in diameter. Base of chancre is clean, red, smooth, and glistening; borders are raised and indurated. Chancre heals within 3 to 8 wks.
- *Causative organism:* *Treponema pallidum*, a spirochete.
Incubation: 9–90 d after exposure.
- May develop inguinal lymphadenopathy within 7 d; lymph nodes are rubbery, nontender, mobile.
- 20%–30% of patients develop secondary syphilis while chancre still present (suggests coinfection with HIV).
- Distinguish from: genital herpes simplex; chancroid; granuloma inguinale from *Klebsiella granulomatis* (rare in the United States; four variants, so difficult to identify).

-Testicular disorders and cancer (p. 559):



-Know the signs of epididymitis (pg. 560)

Acute epididymitis: an acutely inflamed epididymis is indurated, swollen, and notably tender, making it difficult to distinguish from the testis. The scrotum may be reddened and the vas deferens inflamed.

-Know what Condylomata Acuminata is= GENITAL WARTS (pg. 557)

Genital warts- single or multiple papules or plaques of variable shapes; may be round, acuminata (pointed), or thin and slender. May be raised, flat, or cauliflower like (verrucous). Caused by HPV, usually strains 6 & 11. Incubation usually weeks to months. Infected contact may have had no visible warts. Occasionally cause itching and pain. May disappear without treatment. Can arise on penis, scrotum, groin, thighs, or anus (in males).

-Male incontinence (p. 963): In men, there is androgen-dependent proliferation of prostate epithelial and stromal tissue, termed benign prostatic hyperplasia (BPH), that begins in the third decade, continues to the seventh decade, then appears to plateau. Only half of men will have clinically significant enlargement, and of those, only half will report symptoms such as urinary hesitancy, dribbling, and incomplete emptying. These symptoms can often be traced to other causes like coexisting disease, use of medications, and lower urinary tract abnormalities.

-Conditions of penis and testicles:



-Tanner staging:

Sexual Maturity Rating in Boys

In assigning sexual maturity rating in boys, observe each of the three characteristics separately because they may develop at different rates. Record two separate ratings: pubic hair and genital. If the penis and testes differ in their stages, average the two into a single figure for the genital rating. These photos demonstrate pubertal development in an uncircumcised male.

| | Pubic Hair | Penis | Testes and Scrotum |
|---------|---|---|--|
| Stage 1 | Preadolescent—no pubic hair except for the fine body hair (vellus hair) similar to that on the abdomen | Preadolescent—same size and proportions as in childhood | Preadolescent—same size and proportions as in childhood |
| Stage 2 |  Sparse growth of long, slightly pigmented, downy hair, straight or only slightly curled, chiefly at the base of the penis | Slight or no enlargement | Testes larger; scrotum larger, somewhat reddened, and altered in texture |
| Stage 3 |  Darker, coarser, curlier hair spreading sparsely over the pubic symphysis | Larger, especially in length | Further enlarged |
| Stage 4 |  Coarse and curly hair, as in the adult; area covered greater than in stage 3, but not as great as in the adult and not yet including the thighs | Further enlarged in length and breadth, with development of the glans | Further enlarged; scrotal skin darkened |
| Stage 5 |  Hair adult in quantity and quality, spreads to the medial surfaces of the thighs but not up over the abdomen | Adult in size and shape | Adult in size and shape |

Chapter 14 - Female Genitalia

-Know what the HPV vaccine protects against (p.577,578)

Prevents infection from HPV subtypes 16, 18, 6 & 11 which cause 90 % of genital warts
The bivalent vaccine prevents infection from subtypes 16 and 18.

Recommended for prevention of cervical, vulvar, and vaginal cancers and precancers in females as well as anal cancer, precancers, and genital warts in both female and males

Vaccinated women should still get cervical cancer screening because vaccines do not prevent all HPV subtypes

Condoms do not eliminate the risk of cervical HPV infection

Recommended for those with compromised immune systems including HIV

-Know what bleeding between periods is called (p.570)

Abnormal uterine bleeding, Intermenstrual bleeding

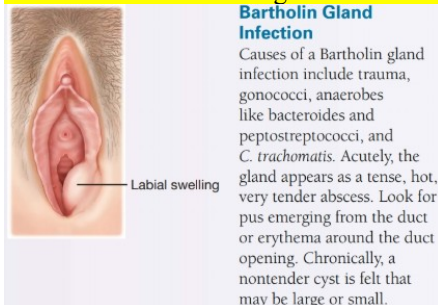
-Know types of vaginosis (p.598)

----*Trichomonal vaginitis*: **Cause**: *Trichomonas vaginalis* (a protozoan), often but not always acquired sexually. **Discharge**: yellowish, green, or gray, possibly frothy. Often profuse and pooled in the vaginal fornix; may be malodorous. **Other symptoms**: Pruritus (not usually as severe as with candida), pain on urination, dyspareunia. **Vulva and vaginal mucosa**: Vestibule and labia minora may be erythematous; the vaginal mucosa may be diffusely reddened, with small red granular spots or petechiae in the posterior fornix. In mild cases the mucosa looks normal. **Lab eval**: Scan saline wet mount for trichomonads

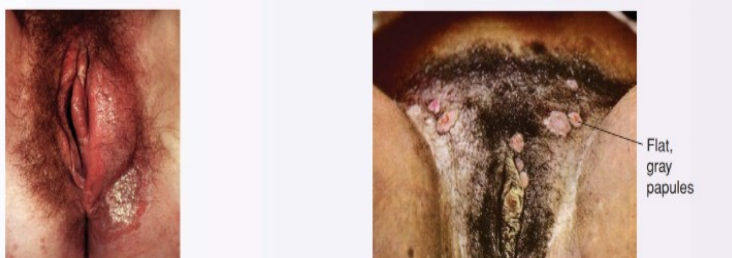
----*Candidal Vaginitis*: **Cause**: *Candida albicans*, a yeast (normal overgrowth of vaginal flora); many factors predispose, including antibiotic therapy. **Discharge**: White and curdy; may be thin but typically thick; not as profuse as in trichomonal infection; not malodorous. **Other symptoms**: Pruritus, vaginal soreness, pain on urination (from skin inflammation); dyspareunia. **Vulva and Vaginal Mucosa**: The vulva and even the surrounding skin are often inflamed and sometimes swollen to a variable extent; the vaginal mucosa is often reddened, with white tenacious patches of discharge; the mucosa may bleed when these patches are scraped off; in mild cases the mucosa looks normal. **Laboratory evaluation**: scan potassium hydroxide (KOH) preparation for the branching hyphae of candida.

----*Bacterial vaginosis*: **Cause**: bacterial overgrowth probably from anaerobic bacteria; often transmitted sexually. **Discharge**: Gray or white, thin, homogenous, malodorous, coats the vaginal walls, usually not profuse, may be minimal. **Other symptoms**: unpleasant fishy or musty genital odor; reported to occur after intercourse. **Vulva and vaginal mucosa**: The vulva and vaginal mucosa usually appear normal. **Laboratory evaluation**: Scan saline wet mount for *clue cells* (epithelial cells with stippled borders); sniff for fishy odor after applying KOH ("whiff test"); test the vaginal secretions for pH >4.5.

-Know how a Bartholin's gland infection presents (p.597)



-Know how syphilis presents genitally (p.596)



Syphilitic Chancre

This firm painless ulcer from primary syphilis forms ~21 d after exposure to *Treponema pallidum*. It may remain hidden and undetected in the vagina and heals regardless of treatment in 3-6 wks.

Secondary Syphilis (Condyloma Latum)

Large raised, round or oval, flat-topped gray or white lesions point to condylomata lata. These are contagious and, along with rash and mucous membrane sores in the mouth, vagina, or anus, are manifestations of secondary syphilis.

-Know the signs of candida vaginitis (p.598)

Discharge that is white and curdy, may be thin but typically thick, not malodorous. Often accompanied by pruritus, vaginal soreness, pain on urination (from skin inflammation) and dyspareunia. Vulva and surrounding skin are often inflamed and sometimes swollen to a variable extent. The vaginal mucosa is often reddened with tenacious patches of white discharge

-Know the signs of ectopic pregnancy (pg. 603)

Clinical presentations of ectopic pregnancy range from subacute, approx. 80-89%, to shock from rupture and intraperitoneal hemorrhage (10-30% of cases). Most common clinical features: abdominal pain, adnexal tenderness, and abnormal uterine bleeding. In more than half there is a palpable adnexal mass that is typically large, fixed, and ill-defined at times with adherent omentum or small or large bowel. In milder cases, there may be a prior history of amenorrhea or other symptoms of pregnancy.


-Female STI: pg 574, 579

Local symptoms or findings on physical examination may raise the possibility of STIs (also referred to as sexually transmitted diseases [STDs]). After establishing the seven attributes of any symptoms, elicit the patient's sexual history. Inquire about sexual contacts and establish the number of sexual partners in the past 3 to 6 months. Ask if the patient has concerns about human immunodeficiency virus (HIV) infection, desires HIV testing, or has current or past partners at risk. Also ask about oral and anal sex and, if indicated, about symptoms involving the mouth, throat, anus, and rectum. Review the past history of STIs.


CDC STI and HIV Screening Recommendations 2014

- Chlamydia and gonorrhea screening annually for all sexually active women ages <25 years and older women with risk factors such as new or multiple sex partners, or a sex partner infected with an STI.
- Chlamydia, syphilis, hepatitis B, and HIV screening for all pregnant women and gonorrhea screening for at-risk pregnant women starting early in pregnancy, with repeat testing as needed to protect the health of mothers and their infants.
- Chlamydia, gonorrhea, and syphilis screening at least once a year for all sexually active gay, bisexual, and other MSM. MSM who have multiple or anonymous partners should be screened more frequently for STIs (i.e., at 3- to 6-month intervals).
- HIV testing at least once for all adults and adolescents from ages 13 to 64 years.
- HIV testing at least once a year for anyone having unsafe sex or using injection drug equipment. Sexually active gay and bisexual men may benefit from testing every 3 to 6 months.

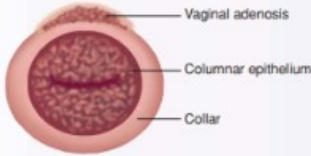
-Cervical disorders: pg 600



Mucopurulent Cervicitis
Mucopurulent cervicitis produces purulent yellow drainage from the cervical os, usually from *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, or herpes infection. These infections are sexually transmitted and may occur without symptoms or signs.



Carcinoma of the Cervix
Carcinoma of the cervix begins in an area of metaplasia. In its earliest stages, it cannot be distinguished from a normal cervix. In later stages, an extensive, irregular, cauliflower-like growth may develop. Early frequent intercourse, multiple partners, smoking, and infection with human papillomavirus increase the risk for cervical cancer.



Fetal Exposure to Diethylstilbestrol (DES)
Daughters of women who took DES during pregnancy are at greatly increased risk for several abnormalities, including (1) columnar epithelium that covers most or all of the cervix, (2) vaginal adenosis, i.e., extension of this epithelium to the vaginal wall, and (3) a circular collar or ridge of tissue, of varying shapes, between the cervix and vagina. Much less common is an otherwise rare carcinoma of the upper vagina.

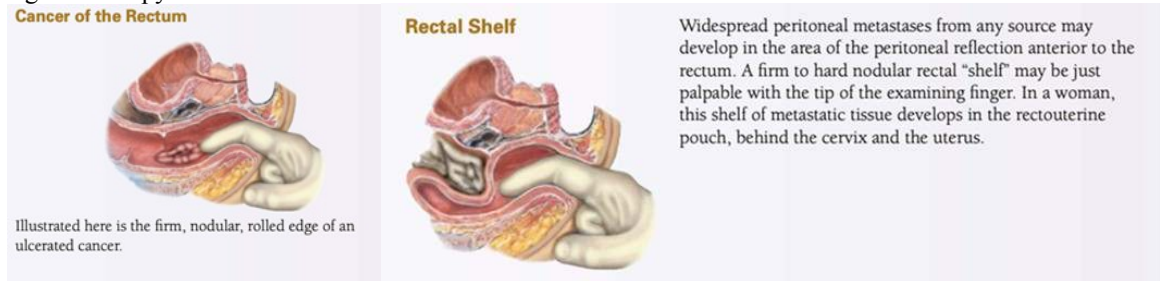
-Cervical cancer screening (pg 576)

Current Cervical Cancer Screening Guidelines for Average-Risk Women: USPSTF, ACS/ASCCP/ASCP, and ACOG

| Variable* | Recommendation |
|---|---|
| Age at which to begin screening | 21 yrs |
| Screening method and interval | Ages 21–65 yrs: cytology every 3 yrs OR Ages 21–29 yrs: cytology every 3 yrs Ages 30–65 yrs: cytology plus HPV testing (for high-risk or oncogenic HPV types) every 5 yrs |
| Age at which to end screening | Age >65 yrs, assuming three consecutive negative results on cytology or two consecutive negative results on cytology plus HPV testing within 10 yrs before cessation of screening, with the most recent test performed within 5 yrs |
| Screening after hysterectomy with removal of the cervix | Not recommended |

Chapter 15 - The Anus, Rectum, and Prostate
 -Know what to be concerned about if you note an irregular rectal mass (p.618)
 Any masses with irregular borders suspicious for rectal cancer

A tender purulent reddened mass with fever or chills suggests an anal abscess. Abscesses tunneling to the skin surface from the anus or rectum may form a clogged or draining ano-rectal fistula. Fistulas may ooze blood, pus, or feculent mucus. Consider anoscopy or sigmoidoscopy for better visualization.



-Know the signs of proctitis (p.609)

Anorectal pain, itching, tenesmus, or discharge or bleeding from infection or rectal abscess suggest proctitis

-Know the sign factors for of prostate cancer (p.610)

Risk factors: age: rare in ages below 40 but incidence rates begin increasing rapidly after age 50. Median age at diagnosis is 66.

Ethnicity: African American men have the highest incidence and mortality rates. Compared to white men, a higher percentage of African American men are diagnosed with prostate cancer before age 50. They are also more likely to present with advanced-stage cancer.

Family history: Genetics appear to play an important role in prostate cancer risk. For men with one affected first degree relative (father, brother) risk of developing prostate cancer increases two fold. For men with 2 or 3 affected first degree relatives, risk increases 5-11 fold. The BRCA1 and BRCA2 mutations also appear to confer increased risk of prostate cancer.

Other risk factors: Agent Orange exposure among Vietnam veterans, diets high in animal fat, obesity, and cigarette smoking. BPH is NOT a risk factor

-Know the signs of prostatitis (pg. 623)

Acute bacterial prostatitis: presents with fever and urinary tract symptoms such as frequency, urgency, dysuria, incomplete voiding and sometimes low back pain. The gland feels tender, swollen, "boggy" and warm.

Chronic bacterial prostatitis: a/w recurrent UTIs. May be asymptomatic or have dysuria or mild pelvic pain. Prostate gland may feel normal without tenderness or swelling.

-Know the signs of BPH (pg. 623)

Symptoms arise from both smooth muscle contraction in the prostate and bladder neck and from compression of the urethra. They may be irritative (urgency, frequency, nocturia), obstructive (decreased stream, incomplete emptying, straining), or both and are seen in more than 1/3 of men by age 65. The affected gland may be normal in size, or may feel symmetrically enlarged, smooth, and firm, though slightly elastic; there may be obliteration of the median sulcus and more notable protrusion into the rectal lumen.

-Know the signs of rectal prolapse (pg. 621)

On straining for a bowel movement, the rectal mucosa, with or without its muscular wall, may prolapse through the anus, appearing as a doughnut or rosette of tissue. A prolapse involving only mucosa is relatively small and shows radiating folds (pic on pg. 621). When the entire bowel is involved, the prolapse is larger and covered by concentrically circular folds

-Know hemorrhoid vs polyp vs cancer (pg. 621)

- Internal hemorrhoids: enlargements of the normal vascular cushions located above the pectinate line, usually not palpable. May cause bright red bleeding, especially during defecation. They may also prolapse through the anal canal and appear as reddish, moist, protruding masses. Pic on pg. 621
- Polyps of the rectum: fairly common and variable in size and number, they can develop on a stalk (pedunculated) or lie on the mucosal surface (sessile). They are soft and may be difficult or impossible to feel even when in reach of the examining finger. Endoscopy and biopsy are needed for differentiation of benign from malignant lesions. Pic on pg. 622
- Cancer of the rectum: usually firm, nodular, rolled edge. Pic on pg. 622

Chapter 18 - Assessing Children: Infancy through Adolescence

-Know what Mongolian spots are (p.816)

AKA Mongolian blue spots, slate grey nevi, formally called congenital dermal melanocytosis

A dark or bluish pigmentation over the buttocks and lower lumbar regions is common in newborns of African, Asian, and Mediterranean descent.

These areas, called slate blue patches, result from pigmented cells in deep layer of the skin; they become less noticeable with age and usually disappear during childhood.

*Document these pigmented areas to avoid later concern about bruising

-Know what pityriasis rosacea presents (p.912)

Oval lesions on trunk, in older children often in a Christmas tree pattern, sometimes a Harold patch (a large patch that appears first)

-Know what a 3yr old can do in regard to jumping and balancing (p.853)

Climbs well, runs easily

Pedals a tricycle

Walks up and down stairs, one foot on each step

-Know what to do if you cannot feel a testicle in the scrotum of a newborn (p.840) If you feel a testis up in the inguinal canal, gently milk it downward into the scrotum. Need to differentiate between undescended testes (in the inguinal canals) and highly retractile testes






-Know what an 8-month-old child should be able to do in regard to standing, using words, and vocalizing what he wants (pg. 810)

Can pull up to stand, say “mama” and “dada” and indicates wants by vocalizing and pointing

-Childhood vaccines: see CDC/ Academy of Pediatrics recommendation for age specific vaccine schedule

-Primitive Reflexes (p 849): Evaluate the newborn’s and infant’s developing central nervous system by assessing infantile automatisms, called primitive reflexes. These develop during gestation, are generally demonstrable at birth, and disappear at defined ages. Abnormalities in these primitive reflexes suggest neurologic disease and merit more intensive investigation.

----A neurologic or developmental abnormality is suspected if primitive reflexes are: Absent at appropriate age; Present longer than normal; Asymmetric; or Associated with posturing or twitching

| | | | | |
|-----------------------------------|---|---|--|--|
| Rooting Reflex |  | Stroke the perioral skin at the corners of the mouth. The mouth will open and the infant will turn the head toward the stimulated side and suck. | Birth to 3-4 mo | Absence of rooting indicates severe generalized or central nervous system disease. |
| Moro Reflex (Startle Reflex) |  | Hold the infant supine, supporting the head, back, and legs. Abruptly lower the entire body about 2 feet. The arms will abduct and extend, hands will open, and legs will flex. The infant may cry. | Birth to 4 mo | Persistence beyond 4 months suggests neurologic disease (e.g., cerebral palsy); persistence beyond 6 months strongly suggests it. Asymmetric response suggests fracture of clavicle or humerus or brachial plexus injury. |
| Asymmetric Tonic Neck Reflex |  | With the infant supine, turn head to one side, holding jaw over shoulder. The arms/legs on side to which head is turned will extend while the opposite arm/leg will flex. Repeat on other side. | Birth to 2 mo | Persistence beyond 2 months suggests asymmetric central nervous system development and sometimes predicts the development of cerebral palsy. |
| Trunk Incurvation (Galant) Reflex |  | Support the infant prone with one hand and stroke one side of the back 1 cm from midline, from shoulder to buttocks. The spine will curve toward the stimulated side. | Birth to 2 mo | Absence suggests a transverse spinal cord lesion or injury. Persistence may indicate delayed development. |
| Placing and Stepping Reflexes |  | Hold the infant upright as in positive support reflex. Have one sole touch the tabletop. The hip and knee of that foot will flex and the other foot will step forward. Alternate stepping will occur. | Birth (best after 4 days; variable age to disappear) | Absence of placing may indicate paralysis. Newborns born by breech delivery may not have a placing reflex. |

| | | | | |
|-------------------------|---|---|-----------------------------|---|
| Landau Reflex |  | Suspend the infant prone with one hand. The head will lift up, and the spine will straighten. | Birth to 6 mo | Persistence may indicate delayed development. |
| Parachute Reflex |  | Suspend the infant prone and slowly lower the head toward a surface. The arms and legs will extend in a protective fashion. | 8 mo and does not disappear | Delay in appearance may predict future delays in voluntary motor development. |
| Positive Support Reflex |  | Hold the infant around the trunk and lower until the feet touch a flat surface. The hips, knees, and ankles will extend, the infant will stand up, partially bearing weight, sagging after 20-30 seconds. | Birth to 2 mo until 6 mo | Lack of reflex suggests hypotonia or flaccidity. Fixed extension and adduction of legs (scissoring) suggests spasticity from neurologic disease, such as cerebral palsy. |

-Know Tanner staging of breasts in females (p.896-897)

Stage 1

Preadolescent: elevation of nipple only

Stage 2



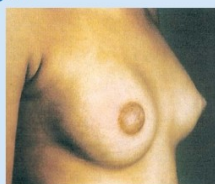
Breast bud stage: elevation of breast and nipple as a small mound; enlargement of areolar diameter

Stage 3



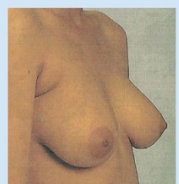
Further enlargement of elevation of breast and areola, with no separation of their contours

Stage 4



Projection of areola and nipple to form a secondary mound above the level of breast

Stage 5



Mature stage: projection of nipple only; areola has receded to general contour of the breast (although in some normal individuals the areola continues to)

-Know miliaria rubra (p.819)

Miliaria Rubra Scattered vesicles on an erythematous base, usually on the face and trunk, result from obstruction of the sweat gland ducts; this condition disappears spontaneously within weeks.



-Know what chicken pox looks like (p.923):

Itchy, rash that turns into fluid-filled blisters that eventually turn into scabs. Occurs on chest, back, face, then spreads over entire body, including inside mouth, eyelids, or genital area.

-Know what atopic dermatitis looks like (pg. 911) -Atopic eczema: raised papule, red, non-blanching.



Atopic Dermatitis (Eczema)

Erythema, scaling, dry skin, and intense itching characterize this condition.

Chapter 19 - The Pregnant Woman

-Know which vaccines are safe during pregnancy (p.937)

Tdap during each pregnancy-> 27-36 weeks, regardless of prior immunization hx

Flu vaccine at any trimester during flu season

Pneumococcal, meningococcal, Hep B

DO NOT GIVE: MMR, polio, varicella

-Know where to place measuring tape when measuring uterus in a pregnant patient (p.944)

Measure the fundal height if gestational age is >20 weeks à fundus should reach the umbilicus

Place tape measure on pubic symphysis and place the “zero” end of the tape measure when you can firmly feel that bone.

Extend the tape measure to the very top of uterine fundus and note the number of cm measured.

- Subject to error between 16-36 weeks

Number should roughly equal the number of weeks of gestation

- If fundal height is >4cm than expected à multiple gestation, large fetus, extra amniotic fluid, uterine leiomyoma
- If fundal height is < 4cm than expected à low-level amniotic fluid, missed abortion, intrauterine growth retardation, or fetal anomaly

-Know diastasis recti is (p.930)

As tension on the abdominal wall increases with advancing pregnancy, the rectus abdominus muscles may separate at the midline, called diastasis recti. If diastasis is severe, especially in multiparous women, only a layer of skin, fascia, and peritoneum may cover the anterior uterine wall, and fetal parts may be palpable through this muscular gap

-Know the signs of gestational HTN (pg. 942)

Gestational is systolic blood pressure (SBP) >140 mm Hg or diastolic blood pressure (DBP) > 90 mm Hg first documented after 20 weeks, without proteinuria or preeclampsia, that resolves by 12 weeks postpartum.

-Ectopic pregnancy signs: range from subacute to shock from rupture and intraperitoneal hemorrhage. Abdominal pain, adnexal tenderness, and abnormal uterine bleeding. Can have palpable adnexal mass that is large, fixed, and ill-defined with adherent omentum or small or large bowel.

-Naegele's Rule: Add 7 days to first day of LMP and then subtract 3 months to calculate due date

-Estimated date of confinement: estimated due date, usually found with Naegele's rule.

-Lab testing of pregnant pt (p 940): The standard prenatal screening panel includes blood type and Rh, antibody screen, complete blood count—especially hematocrit and platelet count, rubella titer, syphilis test, hepatitis B surface antigen, HIV test, STI screen for gonorrhea and chlamydia, and urinalysis with culture. Scheduled screenings include an oral glucose tolerance test for gestational diabetes around 24 to 28 weeks and a rectovaginal swab for group B streptococcus between 35 and 37 weeks. Because obesity is associated with insulin resistance, the obese pregnant patient is at increased risk of both gestational diabetes and type 2 diabetes mellitus. Both ACOG and the American Diabetes Association recommend testing for glucose tolerance in the first trimester for obese pregnant patients

Chapter 20 - The Older Adult

-Senile (Actinic) Purpura (pic) pg. 990: benign, easy bruising that affects older adults.



FIGURE 20-10. Actinic purpura on forearm

-Differentiate delirium vs dementia (pg. 1001)

| | Delirium | Dementia |
|--|---|---|
| Clinical Features | | |
| <i>Onset</i> | Acute | Insidious |
| <i>Course</i> | Fluctuating, with lucid intervals; worse at night | Slowly progressive |
| <i>Duration</i> | Hours to weeks | Months to years |
| <i>Sleep/Wake Cycle</i> | Always disrupted | Sleep fragmented |
| <i>General Clinical Illness or Drug Toxicity</i> | Either or both present | Often absent, especially in Alzheimer disease |
| Mental Status | | |
| <i>Level of Consciousness</i> | Disturbed. Person less alert to clearly aware of the environment and less able to focus, sustain, or shift attention | Usually normal until late in the course of the illness |
| <i>Behavior</i> | Activity often abnormally decreased (somnolence) or increased (agitation, hypervigilance) | Normal to slow; may become inappropriate |
| <i>Speech</i> | May be hesitant, slow or rapid, incoherent | Difficulty in finding words, aphasia |
| <i>Mood</i> | Fluctuating, labile, from fearful or irritable to normal or depressed | Often flat, depressed |
| <i>Thought Processes</i> | Disorganized, may be incoherent | Impoverished. Speech gives little information |
| <i>Judgment</i> | Impaired, often to a varying degree | Increasingly impaired over the course of the illness |
| <i>Orientation</i> | Usually disoriented, especially for time. A known place may seem unfamiliar. | Fairly well maintained, but becomes impaired in the later stages of illness |
| <i>Attention</i> | Fluctuates, with inattention. Person easily distracted, unable to concentrate on selected tasks | Usually unaffected until late in the illness |
| <i>Memory</i> | Immediate and recent memory impaired | Recent memory and new learning especially impaired |
| Examples of Cause | Delirium tremens (due to withdrawal from alcohol) Uremia Acute hepatic failure Acute cerebral vasculitis Atropine poisoning | <i>Reversible:</i> Vitamin B ₁₂ deficiency, thyroid disorders <i>Irreversible:</i> Alzheimer disease, vascular dementia (from multiple infarcts), dementia due to head trauma |

-Know when to give the tetanus vaccine (p.980)

All adults age 19 or older who have not received a Tdap should receive a single dose regardless of the time interval since last Td. After receiving Tdap they should receive Td boosters at 10-year intervals. For adults 65 and older this will reduce the likelihood of transmission to infants under 12 months.

-Know the signs of elder abuse (pg. 985)

Elder mistreatment includes abuse, neglect, exploitation, or abandonment. Prevalence is highest in adults with dementia and depression. COULD NOT FIND SPECIFIC LIST OF SIGNS

-Functional assessment of elderly (p 985-986): Although the specific goals of care vary from patient to patient, preserving the patient's functional status, the "sixth vital sign," is important. Functional status= the ability to perform tasks and fulfill social roles a/w daily living across a wide range of complexity. Establishing functional status provides a baseline for making interventions that optimize the patient's level of function and for identifying geriatric syndromes that can be treated or delayed, such as cognitive impairment, falls, incontinence, low BMI, dizziness, and impaired vision and hearing.

10-Minute Geriatric Screener

| Problem | Screening Measure | Positive Screen |
|---|---|--|
| Vision | Two parts: Ask: "Do you have difficulty driving, or watching television, or reading, or doing any of your daily activities because of your eyesight?" If yes, then: Test each eye with Snellen chart while the patient wears corrective lenses (if applicable). | Yes to question and inability to read >20/40 on Snellen chart |
| Hearing | Use audioscope set at 40 dB Test hearing using 1,000 and 2,000 Hz. | Inability to hear 1,000 or 2,000 Hz in both ears or either of these frequencies in one ear |
| Leg Mobility-Timed Get Up and Go (TUG) Test | Time the patient after asking: "Rise from the chair. Walk 10 feet briskly, turn, walk back to the chair, and sit down." | Unable to complete task in 10 seconds |
| Urinary incontinence | Two parts: Ask: "In the last year, have you ever lost your urine and gotten wet?" If yes, then ask: "Have you lost urine on at least 6 separate dates?" | Yes to both questions |
| Nutrition/weight loss | Two parts: Ask: "Have you lost 10 lbs over the past 6 mo without trying to do so?" Weigh the patient. | Yes to the question or weight <100 lbs |
| Memory | Three-item recall | Unable to remember all three items after 1 minute |
| Depression | Ask: "Do you often feel sad or depressed?" | Yes to the question |
| Physical disability | Six questions: "Are you able to...: "Do strenuous activities like fast walking or bicycling?" "Do heavy work around the house like washing windows, walls, or floors?" "Go shopping for groceries or clothes?" "Get to places out of walking distance?" "Bathe, either a sponge bath, tub bath, or shower?" "Dress, like putting on a shirt, buttoning and zipping, or putting on shoes?" | No to any of the questions |