Chapter 36, Geriatric Emergencies

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Report on Geriatric Emergencies

1. Introduction to Geriatric Emergencies and the Aging Process

Year	Projected Population Aged 65+ (Millions)

2012	

geriatrics focuses on the **assessment and treatment of disease** in individuals aged 65 or older . The population aged 65 and older is projected to nearly double between 2012 and 2050 . Caring for geriatric patients presents unique challenges due to chronic conditions, multiple medications, and the physiological changes of aging . Human growth and development peak in the late 20s and early 30s, after which the **aging process begins** . This process is inevitable and includes changes in physiological functions, like a decline in liver and kidney function . All body tissues age, and the decrease in functional capacity of organ systems is normal, impacting how a patient responds to illness .

2. Communication and Generational Considerations in Geriatric Care

Understanding and appreciating the life of an older person is important . It requires time and patience to interact with older individuals . Always treat patients with respect and avoid **ageism**, the stereotyping that can lead to discrimination . Older people can remain fit and active, though not at the same level as in their youth . **Effective verbal communication** is essential for successful assessment and treatment . Communication can be challenging due to conditions like dementia .

- When caring for older individuals, use their name or "sir" or "ma'am".
- Ask how they prefer to be addressed to build trust.
- Identify yourself and be aware of your presentation.
- Look directly at the patient at eye level in good lighting.
- Speak slowly and distinctly.
- Have one person talk to the patient, asking one question at a time.
- Do not assume all older patients have hearing loss.
- Give the patient time to respond, unless urgent.
- Listen to the answer they provide.
- Explain actions before performing them.
- Avoid talking about the patient as if they are not present.

3. Common Complaints and Leading Causes of Death in Older Adults

Changing physiology predisposes geriatric patients to unique problems . Simple injuries can have severe consequences .

Common Conditions	Leading Causes of Death
	Chronic Lower Respiratory Disease
	Influenza
	Pneumonia
	Heart Disease
	Cancer
	Stroke
	Alzheimer's Disease
	Diabetes
	Accidents/Falls

A simple rib fracture in an 80 or 90-year-old can lead to pneumonia or death . Hip fractures from low-mechanism falls are common with dire consequences . Hip fractures are more likely with weakened bones due to osteoporosis or infection . Sedentary behavior during healing can predispose patients to pneumonia and blood clots . Many older people do not return to their pre-injury activity level after a hip fracture .

4. Age-Related Changes in the Respiratory System

Age-related changes in the respiratory system increase susceptibility to illness . Airway musculature weakening can decrease breathing capacity . Alveoli may

enlarge, losing elasticity and making air expulsion difficult . Slower chemoreceptors cause a delayed response to hypoxia . Loss of protective airway mechanisms includes decreased cough and gag reflexes .

- **Pneumonia** is a leading cause of death from infection in older Americans.
  - Aging causes immune suppression, increasing infection risk.
  - Increased mucus, secretions, and inflammation interfere with oxygenating blood.
  - Management is the same as for other patients.
  - Maintain high suspicion for geriatric patients with pneumonia signs.
- **pulmonary emboli** are sudden blockages by venous clots.
  - Patients may have shortness of breath and chest pain.
  - It can be confused with cardiac, lung, or musculoskeletal issues.
  - Risk factors include nursing home residence, hospitalization, trauma, cancer, blood clot history, heart failure, pacemaker, paralyzed extremities, obesity, smoking, or recent long-distance travel.
  - Symptoms include tachycardia, sudden dyspnea, shoulder/back/chest pain, cough, syncope (with larger clots), anxiety, apprehension, low-grade fever, leg pain, redness, unilateral pedal edema, fatigue, and cardiac arrest.
  - Treatment focuses on airway, ventilatory, and circulatory support. Supplemental oxygen and ventilation may be needed.

5. Age-Related Changes in the Cardiovascular System

Signs/Symptoms	Older Adults	Younger Adults
Myocardial Infarction	Often silent or atypical	Classic chest pain
Heart Failure (Right-Sided)	Jugular vein distension, ascites, peripheral edema, enlarged liver	
Heart Failure (Left-Sided)	Pulmonary edema, shortness of breath, crackles, proximal nocturnal dyspnea	

The heart hypertrophies with age, possibly due to stiffening blood vessels . Cardiac output declines over time due to decreasing stroke volume . Arteriosclerosis contributes to systolic hypertension, burdening the heart . The ability to speed up contractions, increase strength, and constrict vessels decreases with stiffer vessels .

- **Atherosclerosis** is the buildup of fat and cholesterol in arteries.
- Older people are at increased risk for **aneurysms**. Severe blood loss can occur if an aneurysm ruptures.
- Stiff blood vessels result in higher systolic blood pressure. Stiffening and degeneration of heart valves may impede blood flow.
- Changes in the heart's electrical conduction system can lead to abnormal rate or rhythm.
- **orthostatic hypotension** is a blood pressure drop with position change. The body adapts less to rapid postural changes.
- **venous stasis** can cause clots, leading to deep vein thrombosis or pulmonary emboli. Loss of proper vein function in the legs also occurs.
- **Myocardial infarcts** (heart attacks) often lack classic symptoms in geriatrics. Up to one-third of older patients have silent heart attacks. This is more common in women and patients with diabetes. Atypical signs include epigastric/abdominal pain, loss of bowel/bladder control, nausea, vomiting, weakness, dizziness, lightheadedness, syncope, fatigue, and confusion. Other signs include diaphoresis, pale/cyanotic/mottled skin, abnormal breath sounds, and increased peripheral edema. Treatment involves airway, ventilatory, and circulatory support, aspirin, and assisting with nitroglycerin.
- **Heart failure** symptoms vary based on the affected side. Right-sided failure shows fluid backup in the body (jugular vein distension, ascites, peripheral edema). Left-sided failure causes fluid in the lungs (pulmonary edema, shortness of breath, crackles). Proximal nocturnal dyspnea is sudden respiratory distress waking a person at night due to fluid accumulation in the lungs. Symptoms include coughing, suffocation feeling, cold sweats, and tachycardia. Treatment is airway, ventilatory, and circulatory support.

6. Stroke in the Geriatric Population

Stroke is a leading cause of death in older people . Preventable risk factors include smoking, hypertension, diabetes, Afib, obesity, and a sedentary lifestyle . Uncontrollable factors include age, race, and gender .

- Signs and symptoms include altered level of consciousness, one-sided numbness, weakness, or paralysis. Other signs are slurred speech, aphasia, visual disturbances, headache, dizziness, incontinence, and potentially seizures.
- **Hemorrhagic strokes** involve bleeding into the brain from broken vessels; they are less common but more fatal.
- **Ischemic strokes** occur when blood clots block blood flow to part of the brain.
- Determining the **onset of symptoms** is important. Patients with symptom onset within a few hours might be candidates for stroke center therapy.
- A **transient ischemic attack (TIA)** can have the same symptoms as a stroke. Always manage the patient as if they are having a stroke.

7. Age-Related Changes in the Nervous System

Sense	Age-Related Changes	Impact
Vision	Decline in acuity, depth perception, light accommodation	Increased likelihood of falls and medication errors
Hearing	Difficulty hearing high frequencies, balance problems	Falls more likely
Taste	Diminished sense of taste	Lessened interest in eating, weight loss, malnutrition, fatigue
Touch	Decreased sense of touch and pain perception	May not know if injured

Normal findings in older people include changes in thinking speed, memory, and posture stability . The brain decreases in weight and volume with age, increasing space in the cranium and the risk of head injuries . There is a loss of neurons that affects control of breathing, heart rate, blood pressure, hunger, thirst, and body temperature . Performance of most sense organs declines with age .

- **Vision** changes include cataracts, which interfere with vision, making it hard to distinguish colors and see clearly. Decreased tear production leads to drier eyes. Older people may have difficulty differentiating colors and decreased

night vision. Presbyopia, the inability to see up close, is caused by less lens elasticity. Other diseases affecting vision include glaucoma, macular degeneration, and retinal detachment.

- **Hearing** changes in the inner ear make high-frequency sounds difficult to hear. Ear changes can also cause balance problems, increasing fall risk. Heredity and noise exposure contribute to hearing loss. Check for hearing aid use during assessment.
- The sense of **taste** diminishes due to decreased taste buds, potentially leading to less interest in eating, weight loss, malnutrition, and fatigue.
- A decreased sense of **touch and pain** perception from nerve fiber loss means an injured person may not realize it. Decreased sensation of hot and cold also occurs.
- **dementia** is a chronic, generally irreversible condition with slow onset, progressive disorientation, shortened attention span, and loss of cognitive function. Causes include Alzheimer's, Parkinson's, stroke, and genetic factors. Patients may show loss of cognitive function, memory problems, decreased attention span, decreased communication ability, and confusion.
- **delirium** is a sudden change in mental status, consciousness, or cognitive processes. It is marked by inability to focus, think logically, and maintain attention. It affects a significant percentage of hospitalized older adults. It is usually caused by reversible physical ailments like fever or metabolic causes. Look for histories of intoxication/withdrawal, UTIs, bowel obstruction, dehydration, fever, cardiovascular disease, hyperglycemia/hypoglycemia, depression, malnutrition, and environmental emergencies. Assess for hypoxia, hypovolemia, hypoglycemia, and hypothermia. Changes in circulation, breath sounds, motor function, and pupillary response may be seen.
- **Syncope** should always be assumed to be an underlying life-threatening problem until proven otherwise. It is often caused by interrupted blood flow to the brain.
- **neuropathy** is a disorder of the peripheral nervous system nerves, impairing their function and structure. Symptoms depend on the affected nerves (motor, sensory, autonomic) and their location.

8. Age-Related Changes in the Gastrointestinal and Renal Systems

Changes in the gastrointestinal system affect digestion . Reduced saliva volume causes mouth dryness . Dental loss is widespread, contributing to nutritional and digestive problems . Gastric secretions are reduced . Changes in gastric mobility lead

to slower emptying . The incidence of certain bowel diseases increases with age . Blood flow to the liver declines, decreasing enzyme activity and metabolism . This affects how medications impact patients .

- Poor muscular tone of sphincters can lead to regurgitation, heartburn, and acid reflux. The rectal sphincter also weakens.
- **GI bleeding** is common. Causes include inflammation, infection, and obstruction. Hematemesis (vomiting blood) is seen with upper GI bleeding. melena (black, tarry stools) usually indicates bleeding in the lower tract. Red blood often signifies a local source like hemorrhoids. Patients may experience weakness, dizziness, or syncope with GI bleeding. GI bleeding can be life-threatening.
- Specific common GI problems include diverticulitis, bleeding in the upper/lower GI system, peptic ulcer disease, gallbladder disease, or a bowel obstruction. Ask about NSAID and alcohol use. Orthostatic vital signs can help determine hypovolemia. Treatment includes airway, ventilatory, and circulatory support.
- **Acute abdomen** complaints in the pre-hospital setting pose the threat of blood loss, leading to shock and death. Abdominal aortic aneurysm (AAA) is a rapidly fatal condition.

Age-related changes in the renal system include reduced function and blood flow . Kidney weight decreases, leading to a loss of functioning filtering surface . Renal blood flow can decrease by 50% . Acute illnesses in older patients often involve electrolyte imbalance due to a markedly decreased thirst mechanism . This can cause rapid and severe dehydration .

- **Incontinence** is not a normal part of aging and can cause skin irritation, breakdown, and UTIs. Bladder capacity decreases with age.
  - **stress incontinence** occurs during activities like coughing, laughing, sneezing, lifting, and exercise.
  - **urge incontinence** is triggered by fluids, running water, or thinking about the bathroom.
- **Urinary retention**, or difficulty urinating, is the opposite of incontinence. An enlarged prostate (benign prostate hypertrophy) in men can pressure the urethra, making voiding difficult.
- Bladder and urinary tract infections can cause inflammation. Severe urinary retention can lead to renal failure.

9. Age-Related Changes in the Endocrine and Immune Systems

A significant change in older persons is a decrease in metabolism . This affects the body's metabolism, temperature, growth, and heart rate . Symptoms attributed to this include slower heart rate, fatigue, drier skin/hair, cold intolerance, and weight gain . Increased secretion of antidiuretic hormone can cause fluid imbalance . Hyperglycemia and increased norepinephrine levels may harm the cardiovascular system .

- **Hyperosmolar hyperglycemic nonketotic syndrome (hhns)** is a diabetic complication more common in type 2 diabetes. hhns and diabetic ketoacidosis (DKA) symptoms often overlap. Symptoms include hyperglycemia, polydipsia, polyuria, polyphagia, dizziness, confusion, altered mental status, and possibly seizures. Changes in circulation may include warm, flushed skin, poor skin turgor, pale/dry oral mucosa, and a furrowed tongue. Patients may show hypotension and shock signs like tachycardia. Blood glucose is typically 600 or higher in hhns, while it varies in DKA. DKA presents with Kussmaul's respirations; hhns does not. Treatment includes airway, ventilatory, and circulatory support.

Older people's immune systems may be weakened . They may not develop a fever; hypothermia can indicate severe systemic infection . Anorexia, fatigue, weight loss, falls, or changes in mental status may be the primary symptom of infection . Pneumonia and UTIs are common in bedridden patients . When infection occurs, signs and symptoms may be decreased or minimized .

10. Age-Related Changes in the Musculoskeletal and Skin Systems

Common Musculoskeletal Conditions	**Description**
Osteoporosis	Decrease in bone mass and strength, leading to fractures
Osteoarthritis	Progressive joint disease destroying cartilage, forming bone spurs, causing stiffness

Aging leads to a widespread decrease in bone mass, especially in postmenopausal women . Bones become more brittle and break more easily . Spinal discs narrow, causing a decrease in height and changes in posture . Joints lose flexibility and may be immobilized by arthritis . Decreased motion and muscle mass result in less strength . Changes in physical abilities can affect confidence in mobility . The muscle system atrophies and weakens, strength declines . Joint ligaments and cartilage lose elasticity, and cartilage degenerates . Stooped posture comes from atrophy of supporting structures and kyphosis (forward curling of the spine) .

- **osteoporosis** makes patients more susceptible to fractures. Bone loss is influenced by genetics, smoking, activity level, diet, alcohol consumption, hormonal factors, and body weight.
- **Osteoarthritis** affects joints like hands, knees, hips, and spine. Patients complain of pain and stiffness that worsens with exertion.

Changes also occur in the skin . Proteins that make skin pliable decline . The fat layer under the skin becomes thinner . Bruising is more common because skin tears easily . Sweat glands respond less readily to heat due to atrophy .

- **Pressure ulcers**, or bedsores, develop when pressure cuts off blood flow to skin areas. Padding under bony areas and in voids prevents these ulcers. Ulcers have various stages. They can be painful and cause complications like bleeding, sepsis, and bone inflammation.

11. Toxicology and Polypharmacy in Geriatric Patients

Older people are more susceptible to toxicology due to decreased kidney function, altered GI absorption, or decreased liver vascular flow . Kidneys undergo many changes with age . Decreased liver function makes it harder to detoxify blood and eliminate substances like medications and alcohol . Common over-the-counter medications used by older people include aspirin, antacids, cough syrups, and decongestants . These can have negative effects mixed with herbal substances, alcohol, or prescriptions .

- **polypharmacy** refers to the use of multiple prescription medications by one patient. Negative effects can include overdosing and negative medication interactions. Medication non-compliance is also an issue due to financial changes, inability to open containers, and impaired cognitive, vision, or hearing ability.

12. Behavioral Emergencies in Older Adults

Depression is not normal aging but a medical disease affecting millions of older Americans . It is treatable with medication and therapy . Untreated depression is associated with a higher suicide rate in geriatrics . Risk factors include history of depression, chronic disease, and loss . Substance abuse, isolation, prescription medicine use, or chronic medical conditions contribute to depression onset .

- **Suicide**: Most older adult suicide victims have recently been diagnosed with depression and seen a doctor within a month before the event. Older men have the highest suicide rate in the US. Older persons attempting suicide choose more lethal means and have diminished capacity to survive. Predisposing events include death of a loved one, physical illness, depression/hopelessness, alcohol abuse/dependence, or loss of meaningful life roles.
- When assessing a patient showing signs of depression, ask if they are considering suicide. If yes, ask if they have a plan. Include this in your report.

13. The GEMS Triangle for Assessing Older Patients

The **GEMS diamond** was created to highlight differences in older patients . It is an acronym for issues to consider when assessing an older patient .

- **G stands for geriatric**: Older patients differ from younger ones. Be familiar with normal aging changes and treat with compassion and respect.
- **E stands for Environmental Assessment**: Assess the environment for clues to the patient's condition and the emergency's cause. Preventative care is vital as older patients may not notice risks.
- **M stands for Medical Assessment**: Older patients have multiple medical problems and take numerous medications (prescription, OTC, herbal). Obtaining a thorough medical history is very important.
- **S stands for Social Assessment**: Older people may have smaller social networks due to loss of loved ones. They may need help with daily living activities. Consider pamphlets about agencies helping older people.

14. Special Considerations and Assessment of Geriatric Medical Patients

Assessing geriatric patients has special considerations . These include communication issues, hearing/visual deficits, and altered consciousness .

Complicated medical histories and medication effects also affect assessment .

- **Scene safety**: geriatric patients are often in homes, retirement homes, or skilled nursing facilities. Access may be hampered if they cannot reach the door. Note unsafe environmental conditions. Look for clues explaining history or current problem. In facilities, find staff to explain the call reason. With altered mental status, find someone for history and baseline behavior.
- **Mechanism of Illness and Injury (NOI)**: NOI can be difficult to determine with altered mental status or dementia. Ask family, caregivers, or bystanders why they called. Multiple chronic diseases complicate NOI determination. Chest pain, shortness of breath, and altered consciousness are always serious.
- **Primary Assessment**: Address life threats and determine transport priority. Maintain high suspicion for serious injuries, even with minor mechanisms.
  - **General Impression**: Assess stable or unstable condition as you approach. Use AVPU for level of consciousness.
  - **Airway and Breathing (A&B)**: Aging and disease can compromise airway protection. Loss of gag reflex and swallowing occurs. Ensure open airway, free from obstruction (dentures, vomit, fluid, blood). Suction may be needed. Anatomic changes affect breathing effectiveness. Loss of protective reflexes decreases ability to clear secretions. Treat airway and breathing issues with oxygen immediately.
  - **Circulation (C)**: Poor perfusion is serious. Changes negatively affect circulation. Lower heart rates and weaker/irregular pulses are common. Vascular changes may make radial pulse hard to feel. Treat circulatory problems with oxygen immediately. Determine if a cardiac abnormality is acute or chronic; manage acute emergencies rapidly.
  - **Transport Decision (D)**: Complaints compromising airway, breathing, or circulation require priority transport. Determine and treat life-threatening conditions; transport priority patients. Older people lack reserves and decompensate quickly. Consider early ALS treatment and immediate transport.

15. History Taking and Secondary Assessment of Geriatric Patients

Find and account for all medications . Communication can be complicated, but thorough history is critical . Determine early if altered consciousness is acute or chronic . Multiple diseases and vague complaints complicate assessment .

- Take a full set of vital signs and determine the patient's normal. The chief complaint may relate to a chronic condition. Obtain a list of medications and take them to the hospital if possible. Transport to a facility familiar with the patient's history if possible. Last oral intake is important for diabetic patients and may indicate dehydration.
- **Secondary assessment**: Protect patient modesty and keep them warm during the exam.
- **Vital signs**: Medications like beta blockers keep heart rate low, preventing tachycardia seen in dehydration/shock. Weak/irregular pulses are common. Circulatory compromise makes radial pulse hard to feel; use other pulse points. Blood pressure tends to be higher. Capillary refill is unreliable due to skin changes and reduced circulation. Respiratory rate should be normal, but chest rise is compromised by stiffness. Pulse oximetry requires adequate perfusion for accuracy.
- **Reassessment**: Reassess geriatric patients often as conditions can deteriorate quickly. Recheck interventions, identify and treat changes. Document all history, medication, assessment, and intervention information. Guidelines for assessing geriatric patients are available.

16. Trauma in the Geriatric Population

Increased Risks and Complications of Trauma	**Factors**
Higher risk of serious injury or death	Slower homeostatic compensatory mechanism
Complicated assessment	Limited physiologic reserves
Subtler physical findings	Normal aging effects
Longer healing process	Existing medical conditions

Older patients have a higher risk of serious injury or death from trauma than younger patients . Several conditions increase this risk and complicate assessment . Physical findings may be more subtle and easily missed . The healing process takes longer .

Older pedestrians are more likely to have life-threatening complications after being struck by a vehicle . Secondary impacts can cause serious injuries .

- Older people are more likely to experience **burns** due to altered mental status, inattention, and compromised neurologic status. Mortality from burns increases with pre-existing conditions and a weakened immune system. Fluid replacement is complicated by renal compromise.
- There is higher mortality from **penetrating trauma**, especially gunshot wounds. Penetrating trauma can easily cause serious internal bleeding.
- **Falls** are the leading cause of fatal and non-fatal injuries in older adults. Nearly half of fatal falls result in traumatic brain injuries.
- Changes in pulmonary, cardiovascular, neurologic, and musculoskeletal systems make older patients more susceptible to trauma. Brain shrinkage increases the risk of cerebral bleeding after head trauma. Skeletal changes and spinal curvature require extra padding during spinal immobilization. Loss of strength, sensory impairment, and medical illness increase fall risk.
- A geriatric patient's overall physical condition may lessen their ability to compensate for simple injuries.
- **osteoporosis** predisposes to hip and pelvis fractures; compression fractures of the spine are more likely.
- Brain shrinkage makes older patients more likely to sustain **closed head injuries** like subdural hematomas. Acute subdural hematomas are among the deadliest head injuries. Serious head injuries are often missed because mechanisms seem minor. Factors predisposing to serious head injuries include long-term alcohol abuse, recurrent falls, repeated head injuries, and anticoagulation medications.

17. Environmental Injuries and Trauma Assessment in Older Adults

Changes in the endocrine system cause delayed internal temperature regulation . Heat gain and loss are further delayed by impaired circulation, decreased sweat production, chronic diseases, medication, and alcohol use . Half of hypothermia deaths occur in older people . Most indoor hypothermia deaths involve geriatric patients . Death rates from hyperthermia more than double in older people . People over 85 are at the highest risk . Trauma in geriatric patients is rarely isolated to a single issue .

- **Trauma Assessment**: Look for clues indicating if a medical incident preceded the trauma. Address life threats and determine transport priority. Transporting

older patients to a trauma center is recommended.

- **General Impression**: Get information from someone familiar with the patient if possible. Use AVPU and GCS for mental status.
- **Airway**: Diminished cough ability makes suctioning important. Assess for dentures but don't remove unless they obstruct the airway.
- **Circulation**: Alcohol and anticoagulants worsen internal/external bleeding. Older patients can go into shock more easily. Hypertensive patients may have normal blood pressure while in shock.

- Investigate the chief complaint and consider past medical conditions.
- **Secondary Assessment**: Perform physical exams like on younger adults, but consider damage likelihood. Head injuries are life-threatening. Examine the chest, considering impaired breathing. Look for bruising and trauma evidence. Assess pulse, blood pressure, and vital signs. Capillary refill is unreliable due to compromised circulation. Beta blockers inhibit tachycardia expected in shock. Repeat the primary assessment. geriatric patients are more likely to decompensate after trauma.
- Broken bones are common and should be splinted. Do not force kyphosis into normal position. Provide blankets and heat to prevent hypothermia. Provide psychological support along with medical treatment. Document assessment, treatment, and reassessment, including status changes.

18. Responding to Calls in Nursing and Skilled Facilities

Calls at nursing homes or skilled facilities can be challenging . Patients often have altered consciousness and cannot provide NOI or mechanism of injury . The most important information is what is wrong and what is different today that prompted the call . Talk to the staff who care for the patient daily .

- **Infection control** is a high priority.
  - **MRSA** infections are common in close quarters like nursing homes. It can be found in ulcers, feeding tubes, and catheters. Protect yourself and reduce spread by washing hands before and after every patient contact. Properly dispose of or disinfect equipment and use standard precautions.
  - **VRE** is a cause of hospital-acquired infections.
  - **RSV** infects upper and lower respiratory tracts. It is highly contagious and found in nasal/throat discharges. Wear appropriate PPE and decontaminate the ambulance/equipment.

- **C. diff** causes hospital-acquired infectious diarrhea. Healthcare workers can carry it after contact with contaminated feces. Alcohol-based hand sanitizers do not kill C. diff. Contact precautions with gowns, gloves, and hand-washing with soap and water are essential to prevent transmission.
- **SARS-CoV-2** causes COVID-19, a respiratory illness affecting vulnerable older people, especially with pre-existing conditions. It spreads through airborne droplets.

19. Caring for Dying Patients and Advanced Directives

More terminally ill older patients are choosing to die at home . Dying patients receive **palliative or comfort care** . This focuses on relieving pain and providing emotional support for the patient and loved ones . Your interaction with a dying patient impacts the family long-term; be understanding, sensitive, and compassionate .

- **Advanced directives** are legal papers guiding relatives/caregivers about medical treatment for patients unable to speak for themselves.
  - A **Do Not Resuscitate (DNR) order** gives permission not to attempt resuscitation from cardiac arrest. A valid DNR must be signed by the patient/surrogate and a physician/healthcare provider.
  - A DNR does not mean "do not treat". If the patient is alive, provide supportive measures like oxygen, pain relief, and comfort.
  - A **healthcare power of attorney** is an advanced directive where an authorized person makes medical decisions for the patient.
  - A **POLST (Physician Orders for Sustaining Treatment)** provides medical orders in addition to advanced directives. Orders may be specific to patients with life-threatening conditions or frail health.
- If there is any question about orders or no written orders, initiate resuscitation.

20. Elder Abuse and Neglect

Elder abuse is any action by a person that takes advantage of an older person's property or emotional state . Abuse can be acts of **commission** (words/actions causing harm, like verbal, physical, sexual assault) . Abuse can also be acts of **omission** (failure to act, like denying nutrition or medical care) .

- Elder abuse is often hidden. Definitions of abuse/neglect vary. Victims are hesitant to report due to feeling traumatized or fearing punishment.

- Abused persons are often frail with chronic medical conditions or dementia. Abuse most often occurs in women older than 75.
- Abusers may be products of child abuse themselves, with abuse being retaliatory. Most abusers are not trained in older person care. Environments like nursing homes are sites where older people sustain harm (physical, physiological, financial, pharmacological).
- Be suspicious of abuse if answers about injuries are concealed or avoided, or if answers are unbelievable.
- Information suggesting abuse includes caregiver apathy or defensiveness, caregiver not allowing patient to answer, repeated ER visits, history of being accident prone, unbelievable/vague/inconsistent injury explanations. Other signs include chronic pain without explanation, self-destructive behavior, eating/sleep disorders, depression, lack of energy, and substance/sexual abuse history. Many abused patients make false statements due to fear of retribution.
- Signs of physical abuse include bruises on buttocks/lower back, genitals/inner thighs, cheeks/ear lobes, neck, upper lip, or inside the mouth. Pressure bruises from a hand may be oval grab marks, pinch marks, or hand prints. Human bites are typically on upper extremities and can cause lacerations/infections. Inspect earlobes for signs of twisting, pulling, or pinching. Investigate multiple bruises in various stages or signs of being undernourished.
- Typical abuse burns are caused by cigarettes, matches, heated metal, forced immersion in hot liquids, chemicals, and electrical sources.
- Check for signs of neglect like lack of hygiene, poor dental hygiene, poor temperature regulation, or lack of reasonable home amenities. Regard injuries to genitals or rectum without reported trauma as potential sexual abuse.

21. Review of Key Concepts in Geriatric Emergencies

What is the least common cause of death in patients over 65? Drug overdose .

According to the GEMS diamond, during which assessment are activities of daily living evaluated? Social assessment .

What condition clouds the lens of the eyes? Cataract .

When treating an 80-year-old woman with a full-thickness burn on her hand, what is important to note? Slowing of reflexes causes delays in pain .

What is the slow onset of progressive disorientation, shortened attention span, and loss of cognitive function? dementia .

A 71-year-old man with a history of hypertension and vascular disease presents with tearing abdominal pain, low blood pressure, high heart rate, high respirations, and a rigid, distended abdomen. What should you consider? Aortic aneurysm .

Which of the following is a physiological sign during aging? Decline in kidney function .

What condition makes elderly patients prone to fractures from minor trauma? osteoporosis .

polypharmacy describes patients who take multiple medications .

Inflicted bruising is commonly found in areas except which one? Forearms; they are usually in hidden areas .