Slow Down: A review of conditions encountered during aging

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Disclosures

I have no financial disclosures.

Objectives

- Review common physiologic changes
- Recognize common conditions
- Determine appropriate screening tools for evaluation of Cognitive Status
- Understand preventative strategies to promote health
- Become familiar with resources
- Discuss Appropriate Planning

https://create.kahoot.it/share/slow-down/76450ed5bodb-4aof-a279-9dd796bd533c

Kahoot

 Breytspraak, L. & Badura, L. (2015). Facts on Aging Quiz (revised; based on Palmore (1977; 1981)).
 Retrieved from http://info.umkc.edu/aging/quiz/.

Terminology

- YOUNG OLD-60-70's
- OLD-70-80's
- OLD OLD-80-90's

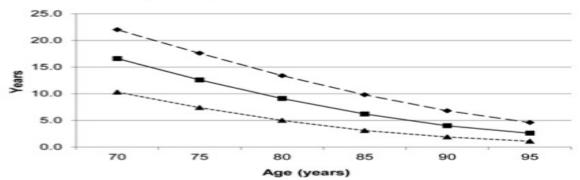


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— ← – Top 25th Percentile
— 50th Percentile

--- Lowest 25th Percentile





B. Life Expectancy for Men

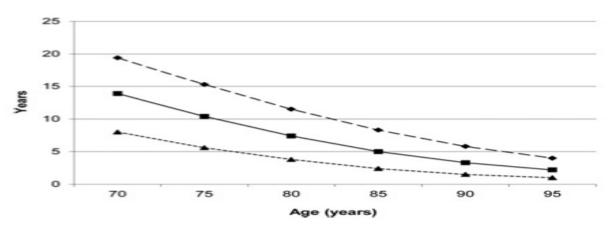


Figure 1.

Upper, middle, and lower quartiles of life expectancy for women and men at selected ages.*

*Data are from the 2008 Life Tables of the United States. This figure shows, for example, that 25% of 90-year-old women in the United States will live more than 6.8 years, 50% will live at least 4.0 years and 25% will live less than 1.9 years. See eAppendix Calculations for Figure 1.

- Over the last 10 years our populations above the age of 65 have continued to rise and will continue for another 20 years due to
 - improved life expectancy
 - "Baby Boomers" population
- By 2050-85 years and older population will triple
- These rising numbers should encourage all physicians and communities to prepare for and become more sensitive to the challenges experienced by our older population

Physiology of AgingUniversal but not Uniform "Normal" Aging

- Visual Impairment
- Hearing Loss
- Vestibular Function Alterations lead to dizziness and Falls
- Muscle mass and strength decline (sarcopenia) alters pharmacokinetics
- Immune system alterations
- Urinary bladder becomes colonized
- Vascular remodeling leads to vascular stiffness
- Cognitive aging (Wisdom, knowledge, empathy and altruism increase)

Your 65-year-old patient mentions to you that he thinks he may need the prescription of his glasses changed. He seems to be having trouble with reading. He is not having trouble seeing objects far away. His central and peripheral vision are not affected. He does not have diabetes. What do you suspect may be causing his symptoms?

Presbyopia

- During the natural aging process, the lens loses its elasticity and, therefore, its ability to become more rounded.
- Lens loses its accommodating power and can no longer focus on objects viewed at arm's length or closer.
- Presbyopia usually begins after age 40 when patients start to appreciate the inability to focus on objects at reading distance.
- In patients with presbyopia, the eye's focusing power for reading is lost progressively and fully by age 65 years.
- Corrective lenses are recommended treatment.

A 71-year-old female mentions during her visit that she is having more trouble with nighttime vision and reading fine print. She has a history of rheumatoid arthritis and has taken corticosteroids intermittently for over a decade. What additional questions would you ask while taking her history? What is the most likely cause of her symptoms?

Typically, bilateral, although it is often asymmetrical.

Patients usually complain of a problem with night driving, reading road signs, or difficulty with fine print.

Cataracts

- Painless, progressive decline in vision.
- On exam: lens opacity, darkening or opacification of the red reflex, obscuration of the fundus

Cataracts

Risk Factors

- Age
- Smoking
- Alcohol consumption
- Sunlight exposure
- Low education
- Malnutrition
- Metabolic syndrome
- Diabetes mellitus
- Systemic corticosteroid use

Treatment

- Standard extracapsular cataract extraction (ECCE):
 - Removal of the lens nucleus in one piece. The lens cortex is aspirated from the eye, and the lens capsule is left behind.

Phacoemulsification:

 The lens is fragmented using ultrasound energy and aspirated from the eye through a small incision. The cortex is aspirated, and the lens capsule is left behind. A 78-year-old woman presents for an appointment with her daughter. The daughter is worried that her mother might be depressed or developing dementia. Her daughter states she has said things to her mother that her mother doesn't remember, and sometimes when she asks her mother questions her mother responds inappropriately (ie, she thinks they are talking about another topic). Also, her mother has stopped going to bingo weekly as she had for years. What type of sensory impairment should you explore during this visit?

Hearing Loss

- Affects approximately 30% of adults 61 to 70 years of age and more than 50% of those older than 85 years.
- Only about 20% of persons 65 years or older with moderate to profound hearing loss perceive themselves as hearing impaired.
- Hearing loss impacts communication and functional ability and is strongly associated with decreased quality of life, cognitive decline, and depression.

Conductive Hearing Loss

- Obstruction of external auditory canal
- Impairment of tympanic membrane function
- Middle ear conditions

Sensorineural Hearing Loss

- Age-related hearing loss
- Noise trauma, mechanical trauma (regular exposure to 85 dB or more increases the risk of hearing loss by mechanical and metabolic damage to cochlear hair cells)
- Medications (eg, aminoglycosides)
- Autoimmune disease
- Meniere's disease
- Infection (eg, meningitis, labyrinthitis)
- Neoplasm (eg, acoustic neuroma)

Diagnosis and Management Hearing Loss

- Formal audiometric testing in a sound-protected environment is the diagnostic standard.
- In office testing:
 - Whisper Test
 - Weber and Rinne
- Hearing Aids
 - Behind-the-ear, in-the-ear, and in-the-canal models.
 - The choice of aid is predominantly determined by the patient's perception of ease of use and appearance.

• You have a 98-YOF in your clinic today who complains of dizziness. She states it feels fairly constant, particularly when she is on her feet. She has had a couple of falls in the last few months. She has HTN, on HCTZ, and idiopathic peripheral neuropathy. She also had low-vision from macular degeneration and quite-troubling hearing loss. What could be contributing to her dizziness?

- a. HCTZ
- b. Low vision
- c. Hearing loss
- d. Peripheral neuropathy
- e. All of the above

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- d. Peripheral neuropathy
- e. All of the above

- Wait for it... let the patient describe
- What are the four types?
 - Presyncope-a "passing out" sensation
 - Vertigo-sense that the room is spinning
 - Disequilibrium-feeling off balance
 - Non-specific dizziness-lightheadedness

Dizziness

- A false sense of motion
 - Self or environment

Vertigo

- Spinning
- Amusement park ride
- Swaying or tilting

Causes of Vertigo

Peripheral "Benign"

- BPPV
- Vestibular neuritis
- Meniere's disease
- Perilymphatic fistula
- Herpes zoster oticus
- Acoustic neuroma
- Ototoxicity
- Otitis media
- Vestibular hypofunction
- Semicircular canal dehiscence syndrome

Central "Serious"

- Migrainous vertigo
- Intracranial mass
- Stroke
 - Cerebellar/brainstem
- Vertebrobasilar insufficiency
- Chiari malformation
- Multiple sclerosis

	Pe	eripheral	Central	
	BPPV	Vestibular Neuritis		
History	-Brief, recurrent-Triggered by positional changes-No vertigo between attacks	-Subacute onset -Constant and severe vertigo lasting days	-Sudden onset -Risk factors for stroke -Severe headache	
Nystagmus	-Up-beating and torsional	-Horizontal and unidirectional	-Direction changing -Purely vertical -Purely torsional	
Gait	-Unaffected between episodes	-May veer toward affected side	-Unable to walk	
Specialized physical exam tests	-Positive Dix-Hallpike maneuver-Positive supine roll test	-Positive head thrust test-Visual fixation stops nystagmus	-HINTS positive -Visual fixation does not stop nystagmus	
Additional Neurologic Signs	-Rare	-Rare	-Common (such as dysarthria, aphasia, incoordination, weakness, or numbness)	

Falls

- Most common nonfatal injury in the elderly
- Falls from a standing height account for the majority of hip fractures in adults over 70 years old
- One in 4 elderly people with hip fracture die with in one year of the injury
- Should screen every patient over 65 for number of falls in the last year
- Often occur due to intrinsic or extrinsic factors

Falls/ Gait Disorders

Intrinsic

- Advanced age
- Previous Falls
- Muscle weakness
- Balance problems
- Poor vision
- Postural hypotension
- Chronic health conditions

Extrinsic

- Lack of stair handrails
- Poor stair design
- Lack of bathroom grab bars
- Dim lighting or glare
- Slippery or uneven surfaces
- Psychoactive medications
- Improper use of assistive device

Which three commonly prescribed medications or medication classes are associated with an increased risk of fall in the elderly?

a. Psychotropics, anticholinergics, antiarrhythmics

b. Psychotropics, antihypertensives, NSAIDs

c. Anticholinergics, antiarrhythmics, anticoagulants

d. Antihypertensives, anticholinergics, anticoagulants

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Medications associated with High Fall Rates

- Psychotropics (benzodiazepines, antipsychotics, antidepressants, sedatives, hypnotics)
- Anticonvulsants
- Anticholinergics
- Antiarrhythmics
- Diuretics

Polypharmacy

- Polypharmacy: Use of five or more medications by a single patient
 - Increases falls, disability and other negative outcomes
 - Providers must weigh risks, benefits, and goals of care when choosing to start or stop medications in an elderly patient
- Beers List: "inform clinical decision making, research, training, quality measures and regulations concerning the prescribing of medications for older adults to improve safety and quality of care."
- http://files.hgsitebuilder.com/hostgator257222/file/a
 gs_2019_beers_pocket_printable_rh.pdf

Work up of Falls

- Typically, no additional labs/ images are needed unless you suspect the fall occurred due to an underlying medical condition
- CBC
- CMP
- EKG
- EEG
- Brain imaging

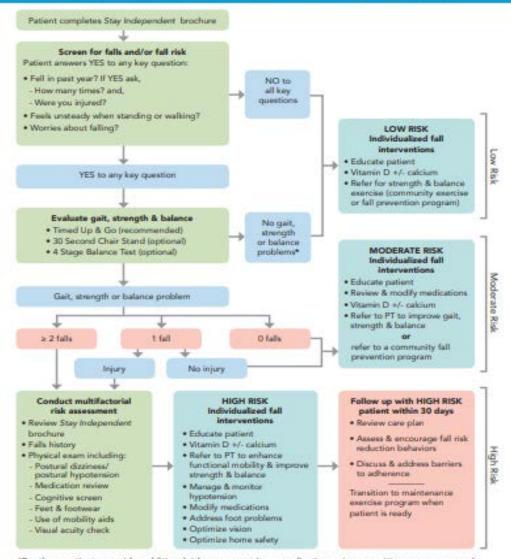
Screening and Prevention of Falls

- Timed Up and Go Test
- STEADI (Stopping Elderly Accidents, Deaths, and Injuries) initiative
- Morse Fall Scale-in-patient nursing assessment

Timed Up and Go Test (TUG)

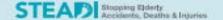
- Patients can use a walking aid if needed. Have the patient sit back in a standard armchair and identify a line 10 feet away on the floor.
- Instruct the patient: When I say "Go," I want you to:
 - Stand up from the chair
 - Walk to the line on the floor at your normal pace
 - Turn
 - Walk back to the chair at your normal pace
 - Sit down again
- An adult who takes ≥12 seconds to complete the TUG is at high risk for falling.

Algorithm for Fall Risk Assessment & Interventions



^{*}For these patients, consider additional risk assessment (e.g., medication review, cognitive screen, syncope)





ASSESSMENT

Timed Up & Go (TUG)

Purpose: To assess mobility

Equipment: A stopwatch

Directions: Patients wear their regular footwear and can use a walking aid, if needed. Begin by having the patient sit back in a standard arm chair and identify a line 3 meters, or 10 feet away, on the floor.

(1) Instruct the patient:

When I say "Go," I want you to:

- 1. Stand up from the chair.
- 2. Walk to the line on the floor at your normal pace.
- 3. Turn.
- 4. Walk back to the chair at your normal pace.
- 5. Sit down again.
- ② On the word "Go," begin timing.
- 3 Stop timing after patient sits back down.
- (4) Record time.

Time in Seconds:

An older adult who takes ≥12 seconds to complete the TUG is at risk for falling.

_					
OB	SE	P۱	IΔ	ПО	NS

□ AM □ PM

Patient

Date

Observe the patient's postural stability, gait, stride length, and sway.

Check all that apply:

NOTE:

Always stay by the patient for

safety.

- ☐ Slow tentative pace
- ☐ Loss of balance
- ☐ Short strides
- ☐ Little or no arm swing
- Steadying self on walls
- □ Shuffling
- ☐ En bloc turning
- Not using assistive device properly

These changes may signify neurological problems that require further evaluation.

Osteoporosis/ Osteopenia

- Fracture risk assessment includes fall risk assessment plus evaluation for osteoporosis.
- The World Health Organization FRAX tool is a validated fracture assessment tool.
- https://www.sheffield.ac.uk/FRAX/tool.aspx?country=9

FRAX tool

- Age
- Sex
- Weight
- Height
- Previous facture
- Parent hip fracture

- Current smoking
- Glucocorticoids
- Rheumatoid arthritis
- Secondary osteoporosis
- Alcohol (≥3 units/day)
- BMD

Normal	T- score ≥ -1.0		
Low Bone Mass (Osteopenia)	-2.5 < T-score < -1.0		
Osteoporosis	T- score \leq -2.5		
Severe or Established Osteoporosis	T-score ≤ -2.5 With one or more fractures		

Defining Osteoporosis by BMD

(HCP Toolkit from the National Osteoporosis Foundation. 2019)

Consider Treatment of Osteoporosis/ Osteopenia

1. Low bone mass (T-score between -1.0 and -2.5 at the femoral neck or spine) plus A and/or B below:

A. ≥ 3% FRAX-calculated 10-year probability of hip fracture

AND/OR

B. ≥ 20% FRAX-calculated 10-year probability of major osteoporosis-related fracture

- 2. A hip fracture or vertebral fracture (clinical or morphometric) regardless of T-score.
- 1. T-score ≤ -2.5 at the femoral neck or spine after appropriate evaluation to exclude secondary causes.

Nonpharmacologic management

- Calcium intake
- Vitamin D intake
- Exercise prescription
- Fall risk modification
- Smoking cessation
- Cessation of excessive alcohol intake

Nutritional Interventions

- Positive association between bone health and healthy diet (high in fruits, veg, whole grains, etc.).
- Encourage calcium and vitamin D intake during childhood and adolescence.
- Vitamin D and calcium is the first step in treating osteoporosis and preventing fracture in adults.

Exercise Prescription

Regular weight-bearing and muscle strengthening exercise to improve:

- Agility
- Strength
- Posture and balance
- Maintain or improve bone strength
- Reduce risk of fall and subsequent fracture

Pharmacologic management

- Bisphosphonates-Alendronate
- RANK Ligand (RANKL) Inhibitor-Prolia
- Calcitonin
- Estrogen
- Selective Estrogen Receptor Modulators (SERM)-Tamoxifen
- Tissue Selective Estrogen Complex
- Sclerostin Inhibitor-Evenity
- Parathyroid Hormone Analog
- Parathyroid Hormone-Related Peptide Analog

Physical Function

- Walking speed declines with normal aging
- Measurements can be used to predict future community ambulation, falls, disability and risk of mortality
- Average walking speed age group 85-89
 - 1.1 m/s for men
 - o.8 m/s for women
 - After age 90
 - .9m/s for men
 - .8 m/ s for women

- Leads to mobility disability
- 73 % of Americans over 85 have some difficulty with walking
- Leads to social isolation, falls and depression
- 1/3 of people over age 85 with a disability live alone
- Leads to elevated BMI and increased weakness over time

Immobility

 With aging ADLs are affected, primarily cooking, grooming, and bathing

ADLs

- Bathing challenges often precede dressing or difficulty using the toilet
- Often people having trouble with ADLs often struggle with chronic pain, depression and complex medication regimens

- A 70-year-old man who has Alzheimer's disease has been treated with donepezil, 10 mg orally at bedtime, for the past six months covered by Medicare Part D. He returns to your office with his wife for a periodic follow-up visit. He has not had nausea, diarrhea, headache, weight loss, changes in sleep, falls, or syncope. Six months ago, the patient was unable to perform instrumental activities of daily living (IADLs) such as paying bills, managing medications, and driving a car. He was able to independently perform all ADLs and was able to recognize all his family members.
- The patient's wife states that she is uncertain if the donepezil is helping her husband's cognition and worries about the number of medicines he takes. The patient continues to be dependent in all IADLs. He now needs help choosing proper clothing for the season; otherwise he remains independent in ADLs.
- Findings on physical examination, including orientation, are normal. Laboratory studies are unremarkable. The patient's score on the Mini Mental State Examination is 20 of 30, which is unchanged from the same examination six months ago.

Which of the following should you recommend now?

- A. Increase the dosage of donepezil to 23 mg orally daily
- B. Discontinue the donepezil
- C. Continue the donepezil for an additional six months
- D. Taper off the donepezil for a trial period

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Dementia

- 2015 about 47 million people diagnosed with dementia
- By 2050, this number is expected to triple
- Increased risk with age
- Affects nearly 40 % of people older than 80
- Progressive neurodegenerative disorder that results in difficulty in at least two of the cognitive domains and leads to impaired function
 - Memory
 - Executive function
 - Language
 - Behavior

Types of Dementia

- Alzheimer disease-50 % cases-short term memory affected, mood changes, difficulty with multitasking
- Vascular dementia-25 % cases-disabling cognition caused by CVA or impaired cerebral blood flow
- Lewy-body related disease-15 % cases-motor symptoms, visual hallucinations
- Frontotemporal dementia-personality changes most notable

Dementia-Diagnostic Tools

- Mini-Cog
 - Good for ruling out cognitive impairment.
- MoCa
 - Good for mild cognitive impairment and neurological problems.
- MMSE
 - Good if you think they already have Alzheimer's.

Nonpharmacologic interventions

- Optimize overall health
- Establish daily and other temporal routines for the patient
- Maximize social interactions, including music therapy
- Consider palliative care consultation

Pharmacologic Interventions

- Acetylcholinesterase inhibitors-donepezil, galantamine, rivastigmine
- NMDA receptor antagonist-memantine
- Approved for mild to moderate disease
- Not recommended for mild cognitive impairment or advanced dementia
- Response to therapy typically occurs within three months

Depression

- The Two Question screen:
 - "During the past month, have you been bothered by feeling of sadness, depression or hopelessness?"
 - "Have you often been bothered by a lack of interest or pleasure in doing things?"
- Geriatric Depression Scale
- Leads to increase risk of suicide

- A 73-year-old woman who has blindness and ESRD was admitted to the hospital for multiple rib fractures and pulmonary contusion after a fall across her coffee table. Since the admission two days ago, her laboratory parameters have been stable after HD. She is requiring 2 L of oxygen and surgery is monitoring her chest to determine if any further interventions will be required. Despite her visual impairment, at baseline the patient was conversant, recognized her family, could express her needs, and could process information. She also has hypertension and CHF. Current medications are aspirin, acetaminophen, atorvastatin, carvedilol and furosemide.
- Currently on hospital day 2, it is noted that she loses track of her ideas in mid-sentence while talking and starts picking at the bed sheets. Her family says that she is more confused than previously, seems drowsy every time they visit, and now does not recognize them. The patient has repeatedly been told that she is in the hospital and each time she has been told this she has become upset. Last evening, she repeatedly tried to climb out of bed and removed her intravenous line. Today, she pulled out her intravenous line again even though staff had covered it up to hide it from sight.
- On physical examination, temperature is 38.3 C (100.9 F), heart rate is 96 per minute, and blood pressure is 148/70 mm Hg. The patient appears restless and is oriented only to person. Her speech is mildly distorted, and she cannot repeat three numbers.

Which of the following should you recommend?

- A. Keeping the television on for distraction
- B. Initiating a bedside sitter
- C. Placing bilateral wrist restraints
- D. Administration of lorazepam 2 mg IV

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Delirium-DSM-5 lists five criteria:

- A. There is a disturbance in attention and awareness.
- B. Delirium develops over a short period of time, typically hours to days. There is a change in baseline attention and awareness. It fluctuates throughout the day.
- C. There is also another disturbance in cognition, such as in memory, orientation, language, and perception.
- D. The disturbances in (A.) and (C.) are not better explained by another pre-existing, established, or evolving neurocognitive disorder. (Having a neurocognitive disorder, however, increases the risk of the development of delirium.)
- E. There must also be evidence that the delirium is due to a direct physiological consequence of another medical condition, substance intoxication or withdrawal, or exposure to a toxin, or is due to multiple etiologies.

Urinary Incontinence

- 30 % of women over 65 and 50 % of adults living in nursing facilities have incontinence
- OAB, stress and functional
- May lead to social isolation, depression and falls
- Common meds used for incontinence have side effects and are on the Beers list.

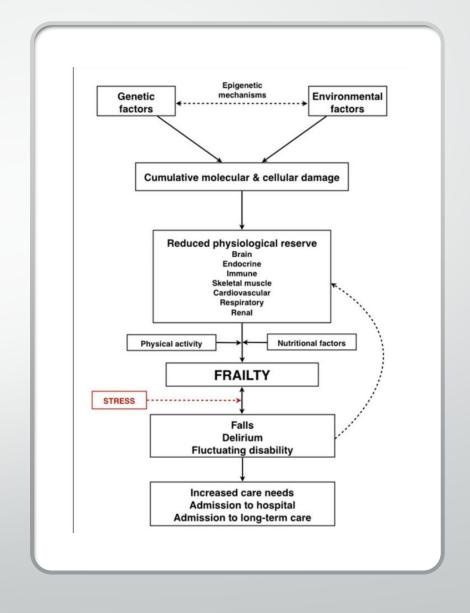
- Frailty: Weakness, slowness, exhaustion, and weight loss
- Decline in one's physiologic reserve leading to increased vulnerability to adverse health outcomes from even minor stressor events

Frailty

- Affects approximately 40 % of people 85-89
- More common in women than men
- Frail individuals are at increased risk of disability and death

Frailty

- Chronic inflammation
- Impaired immunity
- Diminution in physiological reserve across multiple organ systems
- Changes can be subtle and are often dismissed as a normal part of aging



"FRAIL" Questionnaire Screening Tool

- 3 or greater = frailty
- 1 or 2 = pre-frail
 - Fatigue: Are you fatigued?
 - Resistance: Cannot walk up one flight of stairs?
 - Aerobic: Cannot walk one block?
 - Illnesses: Do you have more than five illnesses?
 - Loss of weight: Have you lost more than 5% of your weight in the past 6 months?

A 83 yo female with advanced rheumatoid arthritis, which necessitates use of a wheelchair, presents to the office with a blister over her right heel that her caregiver noticed 3 days prior. On exam, you find a 2x2 cm serous-filled blister overlying the right heel with no drainage and no surrounding erythema. What stage is this pressure ulcer?

- a. Stage 1
- b. Stage 2
- c. Stage 3
- d. Unstageable

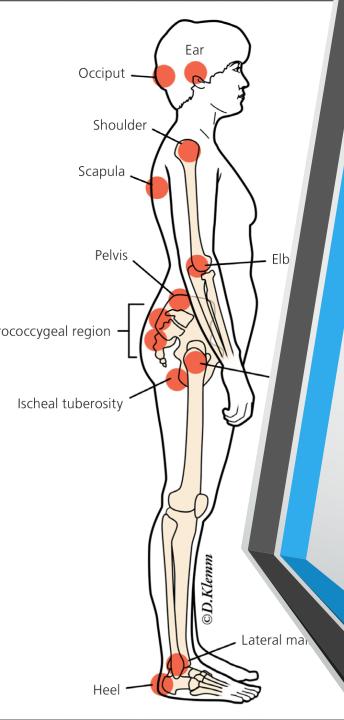
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Pressure Injury

Pressure injury

- Localized injury to the skin or underlying tissue, usually over a bony prominence, due to unrelieved pressure.
- Tissue ischemia and damage occurs because the blood supply to the capillaries is blocked.
- Pressure ulcers can occur at any age; however, 70% of them occur in people 65 years of age and older.



Pressure Injury/ Ulcers

- Multidisciplinary care is critical
 - primary care physicians/ infectious disease consultants
 - nurses (including those specializing in wound care)
 - social workers
 - Podiatrists
 - Surgeons
 - Dietitians
 - Physical and occupational therapists

Risk Factors for Pressure Injury

Intrinsic

- Poor mobility
- Poor nutrition
- Aging skin
- Comorbidities

Extrinsic

- Pressure
- Friction
- Shear
- Moisture

- Stage 1-non blanchable erythema, skin intact
- Stage 2-partial thickness skin loss, blister may be present

Staging

- Stage 3-full-thickness ulceration to the subcutaneous tissue
- Stage 4-full thickness ulceration down to muscle, tendon, or bone
- Unstageable-dark eschar, yellow slough, depth is obscured by necrotic tissue

Treatment

Relieve pressure

- Avoid deconditioning
- Turn and reposition bedridden patients
- Reduce or relieve pressure
 - Pillows
 - Cushions
 - Mattresses and overlays

Cleanse the wound

- Normal saline
- Soap and water
- Antiseptic agents are not preferred because they can damage granulation tissue

Treat infection if present

- Topical antibiotics
- Systemic antibiotics
- Antimicrobial dressings and wound care supplies

 Ensure adequate nutrition and vitamin supplementation appropriate for wound healing: selenium, zinc, Vitamin C

Remove necrotic tissue

- Enzymatic debridement
 - Relatively slow
 - Not for use on infected wounds
- Autolytic debridement
- Mechanical debridement
 - Wet-to-dry
 - Wound irrigation
- Sharp debridement
 - Bedside
 - Operating room

- Keep the wound moist with a cream or an ointment based on the characteristics of the wound.
- Keep the wound covered with an appropriate dressing.
- If the wound is not improving
 - Reconsider the diagnosis
 - Consider culturing the wound for infection
 - Consider a biopsy to rule out cancer
 - Consider specialist consultation

Other potential options for management

- Surgical closure
- Growth factors
- Vacuum-assisted closure
- Electromagnetic therapy
- Ultrasound
- Hyperbaric oxygen

A 77-year-old man has a history of atrial fibrillation on chronic anticoagulation, COPD and diabetes. His house is unkempt and he does not shower or take his medications. He has frequent COPD exacerbations requiring hospitalization but refuses home services. He appears to have decision-making capacity. He lives with his son, who is rarely home during the day, and defers medical decision making to his father. What is the most likely diagnosis?

- a. Self-neglect
- b. Failure to thrive
- c. Anemia
- d. Delirium
- e. Physical abuse

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- b. Failure to thrive
- c. Anemia
- d. Delirium
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Elder Abuse

- Physical abuse
- Sexual abuse
- Emotional abuse
- Financial exploitation
- Neglect
- Self neglect

EASI Questions Q.1-Q.5 asked of patient; Q.6 answered by doctor Within the last 12 months:				
1)	Have you relied on people for any of the following: bathing, dressing, shopping, banking, or meals?	YES	NO	Did not answer
2)	Has anyone prevented you from getting food, clothes, medication, glasses, hearing aides or medical care, or from being with people you wanted to be with?	YES	NO	Did not answer
3)	Have you been upset because someone talked to you in a way that made you feel shamed or threatened?	YES	NO	Did not answer
4)	Has anyone tried to force you to sign papers or to use your money against your will?	YES	NO	Did not answer
5)	Has anyone made you afraid, touched you in ways that you did not want, or hurt you physically?	YES	NO	Did not answer
6)	Doctor: Elder abuse <u>may</u> be associated with findings such as: poor eye contact, withdrawn nature, malnourishment, hygiene issues, cuts, bruises, inappropriate clothing, or medication compliance issues. Did you notice any of these today or in the last 12 months?	YES	NO	Not sure

Red Flags

- Unexplained injuries
- Inconsistent explanations
- Multiple ER visits
- Delays in seeking care
- Inconsistent follow up

Physical Exam

- Findings suggestive of physical abuse:
 - Bruises, burns, or other injuries in unusual locations
 - Bruising—location: face, side of right arm, back
 - Immersion burns—stocking/glove distribution
 - Bruises or burns resembling the object used
 - Poor hygiene, pressure ulcers, or malnutrition may indicate neglect or self-neglect

Management

- Multidisciplinary team approach
- Reporting laws differ from state to state
- Health care providers are mandated to report suspected elder abuse in most states
- Reporters are protected from litigation
- Report to Adult Protective Services
- Contact law enforcement if a patient is in immediate, life-threatening danger

Preventative Strategies

- Osteopathic Manipulation
- Strength Training and Aerobic exercises
 weight loss
- Balance Exercises-improved walking speed
- Nutritional interventions
- Social connections
- Sense of Purpose
- Caregiver Support/ reprieve
- Home Fall Risk Assessment

Medical Conditions Encountered

- Parthritis (2nd MC chronic condition) → Chronic pain and disability
- Hypertension (MC chronic condition)→CAD, CVA, CRI, vascular dementia
- Asthma/ RLD or COPD
- Cancer (2nd Leading cause if death)
- Diabetes
- Multiple Sclerosis
- Osteoporosis
- Parkinson Disease
- DVT or PE
- Shingles
- Dyslipidemia

Directory of Relevant Health Organizations

- Arthritis Foundation
- AGS: Geriatric Healthcare Professionals
- Meals on Wheels
- National Institute on Aging
- National Institute on Mental Health
- National Sleep Foundation
- National Association for Continence
- American Cancer Society
- The Conversation Project

Planning

- Advanced Directives
- Financial power of attorney designation
- Safe Living Considerations
- Safe Driving Considerations-55 Alive/Mature Driving Program thru AARP

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Questions?

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