

Geriatric Smorgasbord: Preventive Care, Dementia, UTIs, and Beyond

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Demographics

- Average U.S. life expectancy is 79 (2014)
- 20% of the US population will be >65 in 2030
- Adults are living longer and life with a chronic illness is a consequence: heart disease, cancer, stroke are the leading cause of death among elderly

Schuylkill County

- According to most recent census data, 21% of our population is >65 y/o
- 8% of our seniors live in poverty
- Transportation is limited
- Increased isolation

Functional Assessment

- Functional decline and/or loss of ADL independence is not a natural consequence of aging
- Chronic health conditions play a large role
- Goal: promote safety and emphasize quality of life



Goal: Healthy Lifestyle

- Still important in this age cohort
- One study suggested that the elderly are at increased risk of moderate/severe disability if engaged in low physical activity, ate one fruit/veg a day, and/or smoker

Physical Activity

- Inactivity increases with age
- Goal: 30 minutes of moderate-intensity activity 5 days per week
- Include strength training and balance training
- Increase mobility, independence, strength
- Decrease blood pressure



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Nutritional Status

- High risk of malnourishment
- Promotion of high-quality, nutrient-dense foods
- Food insecurity?
- Red flag: unintentional weight loss over 6-12 month period
- Low BMI

Fall Prevention

- Declutter home, grab bars, well-lit areas
- Canes: unilateral pain/weakness in leg
- Walkers: preferred for generalized unsteadiness/balance issues
- “Up with the good, down with the bad”
- Assess for visual impairment

TYPES OF CANES



"C" CANE



FUNCTIONAL
GRIP CANE



OFFSET
HANDLE



QUAD
CANE



HEMI
WALKER



FOLDING
WALKING
CANE

Caption

Smoking Cessation

- Even older adults can benefit from cessation
- After 5 years of tobacco cessation, all-cause mortality is equivalent to that of nonsmokers
- Benefit includes those >80 years old



Depression

- Can be difficult to assess in elderly population
- Often undetected
- High suicide rates, particularly in white men >85 y/o
- Increased presentation as apathy, cognitive impairment, somatic concerns, sleep issues, decreased energy

Cognitive Evaluation

- Currently not generally recommended to universally screen in those without symptoms
- Can be beneficial if concerns for memory impairment in early dementia
- MCI (Mild Cognitive impairment) - stage between normal cognition and dementia

Dementia

- Alzheimer's Dementia is the most common
- More than one type of dementia can co-exist
- Gradual, progressive, change from baseline
- Other common forms:
 - Vascular
 - Lewy body
 - Frontotemporal (FT)

Type of Dementia	History	Signs and Symptoms	Pathology/Imaging
Alzheimer's Disease (50–80% of all dementia cases)	Gradual, progressive onset	<ul style="list-style-type: none"> • Memory loss, especially for names and recent events • Language deficits • Rapid forgetting • Impaired visuospatial skills • Normal gait and neuro exam early • Later affective disturbances; behavioral symptoms such as aggression 	<ul style="list-style-type: none"> • Generalized atrophy (esp. medial temporal) • Beta amyloid plaques • Neurofibrillary tangles
Vascular (20–30%)	Abrupt or gradual onset	<ul style="list-style-type: none"> • Focal neurological signs • Signs of vascular disease 	<ul style="list-style-type: none"> • Strokes • Lacunar infarcts • White matter lesions • Vulnerable to cerebrovascular events
Lewy Body (10–25%)	Insidious onset, progressive with fluctuations	<ul style="list-style-type: none"> • Fluctuating cognition • Visual hallucinations • Neuroleptic sensitivity • Shuffling gait • Increased tone • Tremors • Falls 	<ul style="list-style-type: none"> • Generalized atrophy • Lewy bodies in cortex and midbrain
Frontotemporal (10–15%)	Insidious onset, typically in 50s–60s; rapid progression	<ul style="list-style-type: none"> • Disinhibition • Socially inappropriate behavior • Poor judgment • Apathy, decreased motivation 	<ul style="list-style-type: none"> • Frontal and temporal atrophy • Pick cells and pick bodies in cortex

Alzheimer Disease

- Typically occurs after age 65
- Doubles in prevalence every 5 years
- Rare inherited forms can present in 5th decade of life or in those with Down syndrome

A microscopic image of brain tissue, likely from a mouse model of Alzheimer's disease. It shows a central neuron with a dark nucleus and several long, thin, branching processes. The background is a dense network of similar structures, with some areas appearing more intensely stained (reddish-brown) than others, possibly indicating the presence of amyloid plaques or other pathological changes. The overall color palette is dominated by reds, pinks, and purples.

Alzheimer's & the Brain

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Alzheimer Disease: Symptoms

- Memory impairment - declarative episodic memory
- Executive functioning impairment
- Sleep disturbances
- Anosognosia
 - Utilize family members
 - Worse over time

Alzheimer Disease - Mid/Late Stages

- Dyspraxia (difficulty performing learned motor tasks) vs. apraxia (complete loss)
- Seizures
- Neuropsych symptoms

AD - Intervention

- Exercise
- Mental stimulation
- Occupational Therapy
- Physical Therapy
- Medication

Intervention - Agitation

- Routine
- Underlying pain?
- Sleep - too much, too little
- Stimulation
- Environmental stability
- Simplify tasks

Infections in the Elderly

- Decreased immune response to infections
- Decreased antibody response to vaccines
- Chronic conditions contribute to above



Infections in the Elderly

- Those >65 may present with atypical, nonspecific symptoms
 - Decreased appetite
 - Increased confusion
 - Increased falls
- May not mount fever
- Co-existent cognitive impairment may add to complexity of diagnosis

Urinary Tract Infections

- Most common infection in those >65 y/o
- Assessment is impacted by:
 - Cognitive impairment
 - Increased incidence of urinary incontinence, OAB, etc.
 - Higher prevalence of asymptomatic bacteria colonization, which may actually confer protection

Online Resources:

- CDC: STEADI
- Alzheimer's Association
- Local/online support groups

A photograph of the Great Pyramids of Giza in Egypt, with the text overlaid. The pyramids are visible in the background, and the foreground shows the desert sand. The text is in a large, white, serif font.

**“Aging is not lost youth
but a new stage of
opportunity and strength.”**

— Betty Friedan

Thank you!

Questions?

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