General Internal Medicine Review Course

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Themes in the care of Geriatric Patients

- The following slides are selected from a presentation found online. I am not the author, the authors are noted in the next slide

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Geriatrics Overview

Goals:

- After reviewing this module, the student will be able to:
  - Discuss clinical demographics and epidemiology of geriatric medicine
  - Compare and contrast normal and abnormal changes with aging
  - Discuss the impact of heterogeneity in the care of elderly patients
  - Define the “weak link” geriatrics concept

Heterogeneity

As people age, they become more dissimilar than similar in terms of individual physiology. For example:

- A group of 30 year olds has similar cardiovascular endurance, lung capacity, cognitive ability
- A group of 80 year olds may differ much more in basic physiology

With this heterogeneity in function, must know what's normal to recognize disease

Common versus Normal

- Just because a finding is common in the elderly doesn’t mean it’s normal
  - Hypertension, osteoarthritis, and dementia are common in the elderly but not normal
- Patients only discuss things with you that they feel are abnormal
  - If your patient considers incontinence a “normal” part of aging, he/she won’t bring it up during a clinic visit.
- Patient expectations are often wrong

Disability and Disease

- Geriatric disorders are usually disabilities rather than discretely defined diseases
- ADL (Activities of Daily Living) and IADL (Instrumental Activities of Daily Living) difficulties increase with age
  - Less than 10 percent of those 65-69 need help with IADL/ADL
  - 60% of females over 85 living in the community needed help with IADLs, and 40% required help with ADLs

Activities of Daily Living (ADL)

- Activities of Daily Living (ADL) include
  - Dressing
  - Eating
  - Walking
  - Going to the bathroom
  - Bathing
- These are severe functional disabilities and define dependency

Instrument Activities of Daily Living (IADL)

- IADL include:
  - Shopping
  - Housekeeping
  - Accounting/bill paying
  - Food/meal preparation
  - Travel/driving
- These are less severe than ADL, but clearly cause dysfunction and lead to dependency

Weak Link Concept

- Many elderly have one system that is their "weak link". Examples:
  - CNS – dementia, hx of strokes, etc.
  - Neuromuscular – neuropathy, osteoarthritis, deconditioning, etc.
  - Genitourinary – incontinence, prostatism, etc.
- This weak link influences the presentation of diseases

Disease presents differently

- A 90 yo with dementia who develops **pneumonia**
  - may present with delirium
- A 90 yo with osteoarthritis and neuropathy who develops **pneumonia**
  - may present with a fall
- A 90 yo with no “weak link” who develops **pneumonia**
  - may present “typically” – fever, chills, productive cough, etc.

Hard to Cure Syndromes

- Geriatric syndromes may be perceived as difficult or impossible to treat and cure.
- However, a thorough evaluation often reveals many minor contributing disorders that can be improved, resulting in overall effective treatment
- Our job may not be to cure disease in the elderly, but to improve function

For Instance…

- In a patient complaining of nocturia x3 who has an enlarged prostate, an internist may start an alpha blocker
- A geriatrician would
  - Evaluate his medication list and move the diuretic to morning dosing or eliminate it
  - Address sleep hygiene issues (no caffeine before bedtime, no water within 2 hours, etc)
  - Discuss timed voiding
- Multiple “tweaks” may result in improved function

Anticipatory Management

- Identification of a geriatric syndrome can lead to anticipation and avoidance of complications
  - After diagnosis of dementia, anticipate delirium with psychoactive drugs or infections
  - After diagnosis of neuropathy, anticipate falls or hip fracture.
    - Look for vitamin D deficiency
    - Start bisphosphonate
    - Counsel caregiver
- Might not completely avoid these, but can at least prepare the patient and family

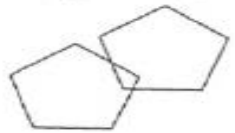
Mental Status Changes

- Dementia is a disease of aging, but not a normal consequence of aging
  - There are many subtypes (see dementia module on the CDROM for more details)
- Delirium occurs as a complication of many disease states in the elderly
- Changes in mental status are the hallmark of dementia and delirium
  - Familiarity with the mini-mental status examination is essential to be able to evaluate mental status!

MINI-MENTAL STATE EXAMINATION (MMSE)

Note: The MMSE is a required part of this dementia assessment.

Maximum Score	Score	
		Orientation
5	( )	What is the (year) (season) (day) (date) (month)?
5	( )	Where are we: (state) (county) (town) (hospital) (floor)?
		Registration
3	( )	Name three unrelated objects. Allow one second to say each. Then ask the patient to repeat all three after you have said them. Give one point for each correct answer. Repeat them until he or she learns all three. Count trials and record. Trials: _____
		Attention and Calculation
5	( )	Ask patient to count backwards from 100 by sevens. Give one point for each correct answer. Stop after five answers. Alternatively, spell *world* backwards.
		Recall
3	( )	Ask patient to recall the three objects previously stated. Give one point for each correct answer.
		Language
9	( )	• Show patient a wrist watch; ask patient what it is. Repeat for a pencil. (2 points)
	( )	• Ask patient to repeat the following: "No ifs, ands, or buts." (1 point)
	( )	• Ask patient to follow a three-stage command: "Take a paper in your right hand, fold it in half, and put it on the floor." (3 points)
	( )	• Ask patient to read and obey the following sentence which you have written on a piece of paper: "Close your eyes." (1 point)
	( )	• Ask patient to write a sentence. (1 point)
	( )	• Ask patient to copy a design. (1 point)



Total Score: _____ Assess level of consciousness along a continuum:

Alert Drowsy Stupor Coma

***Scoring:**

24-30 Uncertain Cognitive Impairment

18-23 Mild to Moderate Cognitive Impairment

0-17 Severe Cognitive Impairment

*The score ranges listed here are widely used, but it should be noted that an MMSE score is only an initial indicator of cognitive status, and norms for the MMSE vary greatly depending on a person's age, education level, and race.

Sources:

Crum, R. M., J. C. Anthony, S. S. Bassett, and M. F. Folstein. 1993. "Population-Based Norms for the Mini-Mental State Examination by Age and Educational Level." *J. Am. Med. Assoc.* 269:2386-91.

Folstein, M. F., S. E. Folstein, and P. R. McHugh. 1975. "Mini-Mental State: A Practical Method for Grading the Cognitive State of Patients for the Clinician." *J. Psych. Res.* 12:196_8.

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Another slide series by a different author found on the internet

INTRODUCTION TO GERIATRIC MEDICINE

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WHO Advisory Panel on Aging and Health

APPROACHING THE OLDER PATIENT

- Do not be an ageist
- Have patience in history taking
- Optimize communication
- Make the patient safe & comfortable
- Get a full medication list
- Assess family’s cooperation & attitude
- Assess care giver’s stress

PHYSIOLOGICAL CHANGES AND THEIR IMPACT

CHANGE: DECREASE IN

- Basal metabolic rate
- Pulmonary function
- Renal function
- Bone mineral
- Gastro-intestinal function
- Sight
- Dentition
- Taste

IMPACT: DECREASE IN

- Calorie needs
- Exercise capacity
- Ability to conc/dilute urine
- Fracture resistance
- Bowel motility
- Independence
- Eating ability
- Appetite

COMMON GERIATRIC DISORDERS

- CVS: hypertension, IHD, heart failure, PVD, syncope
- Resp: pneumonia, tuberculosis, asthma, COPD
- CNS: stroke, dementia, meningitis, encephalopathy
- Endo: diabetes, thyroid, sexual, metabolic diseases
- Musculoskeletal: osteoporosis, OA, RA, falls, fractur
- GIT: dyspepsia, constipation, NSAID gastrop, GERD
- Urogenital: UTI, BPH, menopause, incontin, prolaps
- Cancers: breast, lung, prostate, cervical, haematol
- Spl senses & iatrogenic: eye, ear, taste, skin, ADRs

UNCLASSIFIED SYMPTOMS IN OLD AGE

- Weakness
- Fatigue
- Anorexia
- Constipation
- Altered taste
- Breathlessness
- Low muscle strength
- Body aches
- Confusion
- Insomnia
- Impotence
- Faints/ Falls

Geriatrics

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Geriatrics – Practical points

- Always ask “What troubles you the most?”
- Always ask “If I could help you with one thing, what would it be?”
- Actively reduce polypharmacy every visit if you can
- Always try alternates to medications first
- Follow the “First do no harm” ethical directive
- Never trust them to remember your instructions, write it down
- Always involve family if you can
- Talk about goals and expectations
- Many times the best answer is: do no thing!
- Remind family that “doing nothing” = avoiding harm not giving up