GERIATRIC ASSESSMENT
Senior Advocate, Lunch and Learn
Harbor’s Edge
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Objectives
- Assessing Function
- Physical exam
- Assessing Cognition & mood
- Lab tests
- Final Pearls

Concept of Homeostenosis
- The concept where normal aging decreases the body’s ability to withstand stress and challenges as homeostatic mechanisms decline over time
- These progressive changes start as early as the third decade of life, which is the origin of the expression, “Aging begins at 30”.

Diseases Associated with Aging
- Along with normal changes associated with aging there are also pathological changes often mistaken as being caused by aging, and which contribute to much loss of life and quality of life in seniors
- They include, anemia, dementia, hypothyroidism, stroke, and CHF
- While they are common they are not inevitable to all persons, and not all seniors will have them

Jean Calment
- Longest confirmed human life span in history (122 yrs and 164 days)
- Took up fencing at age 85
- Rode a bike until age 100
- Lived independently until age 110
- Smoked from age 21 to 117 (quit 5 years before her death; Feb 21, 1875 – Aug 4, 1997)

Population over 65 years
- Chart showing population over 65 years
Which is the fastest growing segment of our population?
A. Under 25
B. 35-55
C. 75-85
D. Over 85

Goals of Geriatric Medicine
Maximize the positive aspects of aging
1. Compression of morbidity
2. Delaying the onset of chronic disease
3. Maximize function despite that disease

Approach to Illness in the Older Patient
- Presenting problem is just the “tip of the iceberg” of a pathological process, which takes careful diagnostic assessment to uncover.
- For example, a certain elderly patient is having recurrent falls. Why?
Traditional Medical Model; “The law of parsimony”

Elementary signs & symptoms from History and Examination
Clumping of these in clusters
Grouping of clusters into a syndrome
Specific Disease

Problems with the old model
- Other factors to consider
  - Psychosocial and behavioral dimensions of illness, or the interactions of multiple illnesses
  - You don’t just want to know one reason a person is having falls at home, you want ALL their reasons!

“Geriatric Giants”
- Think of problems or syndromes that cross several organ systems rather than being than distinct disease diagnoses
- Many, mistaken for normal aging, can often be improved
- “Geriatric Giants” include:
  - Cognitive impairments
  - Falls
  - Incontinence
  - “Failure to Thrive”

Atypical Presentation of Disease
- Illness in old age often presents atypically, or is often masked;
  - unrecognized dementia, delirium, and/or depression
  - depression w/o sadness, infection w/o fever, CHF w/o dyspnea
  - Silent MI or Urinary Tract infection presenting as confusion
  - Zoster-Varicella (“shingles”) presenting as chest/back pain
  - New onset falling, confusion, incontinence presenting as “failure to thrive”

Geriatric Assessment
Focus is function NOT cure

What is in an Assessment?
- Domains covered in a comprehensive geriatric assessment include:
  - Medical history & physical examination
  - Medications
  - Current living situation
  - ADLs & IADLs
  - Vision/Hearing/Mobility/Bowel/Bladder/Diet
  - Cognitive status
  - Emotional status of patient and caregivers
Fauja Singh

- World’s oldest marathon runner
- DOB 4/1/11
- October 16, 2011
  - 8th Marathon
  - Started at age 89

Who needs a Geriatric Assessment?

- Anyone with 3 or more “Red Flags”:
  - >75 years of age
  - Needs help with ADLs/IADLs by caregiver
  - Lives alone
  - Falls
  - Delirium/confusion
  - Incontinence
  - >2 admissions to acute care hospital/year

8 steps to Geriatric Assessment

1. Get the History
2. Medication Review
3. Functional Inquiry
4. Physical Examination
5. Cognitive Testing
6. Testing for Emotional Problems
7. Targeted investigations
8. Impression, plan, and follow-up

1. Get the History of the Major Problem

- Similar process of information capture used for younger patients.
- Be patient, and let the patient talk at first
  - If after 5 minutes you aren’t getting the information you need, change from open-ended to close-ended questions.

You MUST be able to confirm this history with a reliable witness, especially if you suspect memory loss

Collateral history

Getting the History if there is Memory Loss

- Ask if the patient knows why they are there to see you
  - If they don’t know, and deny any memory problem, ask them to tell them a little about themselves
- Explore their biographical past
  - If you note problems in things they should know (how old they are, who their children were, when they retired), gently tell the patient you can see they are having problems.
- Test cognition
  - MUST obtain information on their history from a reliable person (caregiver, family member, old hospital chart, etc.)

Hints on talking & listening to patients

- Offer the patient their eyeglasses and hearing aids (and dentures so they can speak)
- Use body language so they know you are talking to them
- Speak in a deep, low voice in a quiet, well lit room free of distractions
- Use a hearing amplifier if one is available
Past Medical History and ROS
- Done much along the same lines as you would obtain any other adult.
- Review of Systems (ROS)
  - Don’t forget to ask about under-reported disorders:
    - Bladder or bowel problems
    - Falls
    - Pain
    - Memory issues
    - Mood issues
    - Current diet

2. Medication Review
- Don’t forget lotions, potions, creams, eye-drops, puffers, insulin, oxygen, ear drops, vitamins, herbals, supplements
- “Brown Bag Technique” where all meds the patient is taking placed are into a paper bag to be brought in and examined by the MD.
  - You can also call their pharmacy for collateral information

Medication Review
- Be aware of “safe” medications

3. Functional Inquiry
- ADLs and iADLs
  - Vision and Hearing
  - Mobility
  - Continence
  - Biography
  - Current Living Situation
  - Services
  - POA & Advance Directives

Which of the following are instrumental ADLs?
A. Toileting
B. Ambulation
C. Shopping
D. Feeding
E. Medication management

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**Functional Inquiry**

- **Activities of Daily Living (ADLs)**
- Toileting, feeding, dressing, grooming, ambulation, & bathing.
- For each ask if independent, needs assistance or dependent.
- Think of them as things a grade one student has to do each morning to get ready for school.

**Instrumental Activities of Daily Living (IADLs)**

- Shopping, meal planning & preparation, housekeeping, laundry, transit, financial management, using a telephone, medication management, and driving.
- For each ask if independent, needs assistance or dependent.

**Mobility Inquiry**

- Completely independent
- Assistive gait device
  - Cane
  - Quad cane
  - Walker
  - Wheelchair
- When and why?

**Vision and Hearing Inquiry**

- Problems with vision?
  - Glasses or contacts?
  - When were they last changed?
  - When was the last time they saw their eye doctor?
- Problems with their hearing?
  - Audiology testing?
  - Hearing aid
  - Do they use it?

**Ask about Continence**

- Problems with their bladder or bowels (and what does their caregiver say)?
- Ever had an accident?
- Wear a pad or adult diapers?
- Frequently in the night to toilet?

**Get a Brief Biography**

- Where were they born? Did they have any siblings (and how is their health now)?
- How much schooling did they complete? What did they do for a living? Where they ever married? Any children? Where are they now?
- When did they retire? How have they kept themselves busy?
Estrid Geersten

Oldest tandem parachute jump
100 years, 60 days
Sept 30, 2004
Altitude of 4000m (13,100 ft) over Roskilde Denmark

Current Living Situation

Type of dwelling (i.e. isolated farmhouse, apartment, 3 story walk-up)?
Is it appropriate for their needs (near a bus route if no car, close to family, shopping)?
Assess safety risks (i.e. fire, cold, appropriate clothing, falls, malnutrition, ability to call for help,
With whom do they live (alone, spouse, child, friend, or ?)
Health of spouse (if appropriate). What is their diet like now? (makes meals, MOW, skips meals etc.)

Formal Services

Does the patient receive outside services? (Jewish Family Services, SeniorCorp, Catholic Charities)
Are Home Health Services involved?
Are they seeing PT, OT, SW, ST?
Are they enrolled with Meals-on-Wheels? Lifeline?

POA and Advance Care Plans

Power of Attorney (POA)
Have these been formally completed?
Who is it? When was it done?
Advanced Directives (*Living Wills)
What are the patients (and the family/s) wishes on their choice of life saving treatments (or no treatment) when they are endangered from a medical illness? Are they indicated anywhere?

A patient who is DNR should not be admitted to the Intensive Care Unit
A. True
B. False

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A. True
B. False
4. Physical Examination of the Older Adult

Timed Up and Go (TUG)
- Rise from sitting position
- Walk 10 feet
- Turn around
- Return to chair and sit down

Timed Up and Go
- Less than 20 seconds
  - Adequate for independent transfers and mobility
- More than 30 seconds
  - Suggests higher dependence and risk of falls

5. Cognitive Testing

The MMSE is a validated and commonly used screening tool for cognitive impairments for whatever cause.

- It does NOT diagnose dementia and is insensitive to early dementia or frontal lobe dementia.

Clock Drawing Test
- NOT part of the MMSE, but a separate test:
- Draw a blank circle, and ask the patient to first put in all the numbers that would appear on a clock face, and then to set the hands to a time you will tell them.
- To ask the question correctly, you must use the same time used in the original studies: "Please set hands of the clock to 10 after 11"
Fluency Tests
- Name as many animals as you can in the next minute
- Name as many words that start with the letter “F” as you can in the next minute

Cognitive Impairments
- A change in how a person thinks, reacts to emotions, or behaves
  - Dementia (chronic confusion, not usually reversible)
  - Delirium (acute confusion, usually reversible)
  - Depression (temporary and reversible)

Which is the most common type of dementia?
A. Lewy Body Dementia
B. Parkinson’s Dementia
C. Alzheimer’s Dementia
D. Vascular Dementia

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6. Testing for Emotional Problems
Depression is the most common mental illness in older adults; it is under diagnosed and under treated.

Screening for Depression
- Ask “Do you often feel sad?”
- Ask about suicidal or pessimistic thoughts
- Do a GDS (next slide)

Geriatric Depression Scale (GDS)
- The GDS is a screening tool for depression, but does not itself diagnose depression.
- There are various forms of the GDS available: a 30 item scale, a 15 question form, a 4 item screen and even a single question screen.
- For the 15 item form of the GDS, >5 points are suggestive, >10 points is very suggestive for depression.

If a positive on the screen, follow up with a more thorough interview.
7. Targeted lab tests
- Order blood work and other investigations only to confirm or rule out hypotheses generated during the H&P.
- i.e., for working up dementia, screening investigations are:
  - CBC, TSH, serum electrolytes, serum calcium & serum glucose
  - +/- CT Head (as per 1999 Canadian Consensus Guidelines)
- i.e., as part of the work-up for falls:
  - CBC, Electrolytes, glucose, calcium, albumen, TSH, B12, & Folate.
  - EEG: consider EEG if you suspect seizure activity, and consider EMG’s if you suspect a nerve conduction problem leading to a peripheral neuropathy.

8. Impression, Plan, and Follow up
- Specific management depends on the specific clinical entities uncovered during the Geriatric Assessment.
  “You’ve seen one 87 year old, you’ve seen one 87 year old”
- “Geriatric Giants”
  - Will require specialized treatment and referral to allied health services
  - Follow-up and after care services should be ideally monitored by a case manager assigned to the patient.

Summary of the 8 steps to Geriatric Assessment
- Step 1: Get the History
- Step 2: Medication Review
- Step 3: Functional Inquiry
- Step 4: Physical Examination
- Step 5: Cognitive Testing
- Step 6: Testing for Emotional Problems
- Step 7: Targeted investigations
- Step 8: Impression, plan, and follow-up.

Interpreting Laboratory Tests
- Labs that change with age (but still in normal range)
  - WBC – slight decrease
  - PaO2 – slight decrease
  - Creatinine clearance – slight decrease
  - Alkaline Phosphatase – 30% increase
  - Total cholesterol/lipids – 30% increase
- Labs that do NOT change with age
  - Hemoglobin (Hb)
  - Platelet count
  - Bilirubin
  - Liver Enzymes (ALT/AST)
  - pH
  - TSH.
  - CALCULATE Creatinine Clearance (Crockcroft-Gault)
    \[
    \text{Creatinine Clearance} = \frac{\text{Actual Body Weight} \times 72}{\text{Creatinine} \times \text{Adjusted Ideal Body Weight}}
    \]

Lillian Lowe
- World’s oldest Facebook user
- 104 (3/4/11) yo Welsh woman
- Uses her grandson’s iPad twice a week
- 34 friends

Final Pearls
- Never assume that a distressing symptom or sign is caused just by “old age” (i.e., anemia, memory loss, pain, incontinence)
- Look for delirium, and screen for it and dementia.
- Look for all the causes of health problems in an elder not just one.
- Get old hospital charts and previous consultations notes
- The telephone can be used to contact Family and Family MD’s to help with the history if the patient cannot provide it.
Communication, communication, communication

Resources

www.geriatricsatyourfingertips.org
www.americangeriatrics.org

The American Geriatrics Society
Dedicated to the Health of Older Americans

Glennan Center for Geriatrics and Gerontology
Eastern Virginia Medical School

- Memory Assessment Clinic
- Geriatrics Consultation
- Driving Evaluation
- Palliative Medicine
- Sentara Norfolk General Hospital
- Hampton Careplex
- Sentara Newtown Rehabilitation and Nursing Center

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