GERIATRICS:
THE SILENT MAJORITY

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Resources: www.bit.ly/GeriatricEmergencies

MYTHS
“Canon of Medicine” in 1025
IL Nascher in 1909 -> ALE:48
IOM 2008: “Woefully Inadequate”
Quality of Life (and Death)
Patient Advocacy

HISTORY
Changes in physiology due to aging.
Chronic, progressive disease processes.
Abnormal presentation of diseases.
Multiple concurrent interactive diseases.
Multiple concurrent treatments.
Non-specific complaints.
Atypical presentations missed

Brittle patients hide complaints, quickly fail.

Sole medical contacts don’t “catch” problems, go untreated.

Familiarity breeds contempt.

Assumption that “old people are gonna die”.
Raise awareness
Raise understanding
Raise index of suspicion
Improve patient outcome
The 1% Rule

We all age differently

Not a disease.
SKIN

Loss of collagen

Reduced layer of fat
Decreased joint flexibility
Decrease in muscle mass. (sarcopenia)
Bone loss (osteopenia)
Brain atrophy (shrinkage).
Separation of the brain from the dura.
Decreased cortical cell count (memory loss).
Slowed nerve conduction.
Decreased pupil size

Loss of accommodation (reaction)

EYES & EARS

Sensory (hair loss -> cilia)

Neural (nerve cell conduction)

Metabolic (stria vascularis -> cochlear fluid)

Mechanical (atrophy of bones of the cochlea)
- max. heart rate 10 beats/min/decade
- resting stroke vol. 30% by age 85
- max. cardiac output 20-30% age 65
- vessel compliance >BP 10-40 mmHg
Vital capacity of lungs will have decreased up to 50% by age 75.

Decreased ciliary activity.

Cough & gag reflexes reduced.
Decreased saliva
Poor swallowing
Decreased acid production
Decreased digestion
Diminished motility
KIDNEYS

- Decreased size and filtering function
- Decreased immune system
- Decreased blood clotting factors

& LIVER
Decreased activity levels
Loss of family / friends
Isolation / Depression
Failure to thrive.
Speak at the patient’s level.

Don’t be overly familiar unless specifically allowed.

Ask questions clearly.

Establish “What are the CHANGES today?”

Do not assume. Ask and clarify.

Observe patient’s environment.
Talk to family but DON’T ignore patient.

ECF Staff should have information, Face Sheet. Observe the patient’s medications.

Explain procedures clearly as needed. Patient comfort and modesty are important.

The difficult elderly. Be nice.
More total deaths and injuries than any other form of trauma for geriatric patients.

5% Hospital admissions.

40% nursing home admits.

2% Hip Fx. (18-33% mortality).
MVAs

7,600 annual geriatric deaths.

More likely multi-trauma.

Poor compensation for multi-trauma.
STROKE

Cincinnati Prehospital Stroke Score

FAST

Is it a stroke?
Check these signs
FAST!

Call 9-1-1 at any sign of stroke.
DEMENTIA

Determine Baseline

Speech

Awareness

ADLs

1% 60 - 65 y/o

30% - 50% >85 y/o
Bradykinesia
Rigidity
Resting Tremor

Most common cause of parkinsonian Sx.
Dopamine deficiency.
Treatment has many side effects.
Multifaceted, often idiopathic disorder.
PNEUMONIA

- Bacterial infection
- Increased incidence from:
  - Nursing homes (groups)
  - Poor swallowing
  - Decreased gag reflex
  - Decreased cough
  - Decreased immune system
DIFFERENTIAL Dx.

Poorly expressed by the elderly

Fever / Chills (30%-60%)

#1 sign is delirium

Ronchi (rattles)

Gradual onset

Yellow or Green sputum

CXR (diagnostic)
CHRONIC BRONCHITIS
Increased secretion & wall thickening

CHRONIC EMPHYSEMA
Destruction of lung parenchyma
COPD

DIFFERENTIAL Dx

Dyspnea
Increased WOB
Wheeze
Pink Puffer
Blue Bloater
CO-FACTORS

Pneumonia

Pneumothorax

Difficulty in weaning
Immobilization / Bed rest / Sedentary lifestyle
Recent Trauma or Surgery
DVT

Diagnostically confusing
Sudden tachypnea / dyspnea
Pleuritic (breathing) Chest Pain
Hemoptysis
R sided Heart Failure
Chronic or Acute
Interactive comorbidities
Impediments to flow
Heart damage
Fluid overload
AMS
CP
DOE
HTN
L - Pulmonary Edema
L - Orthopnea
L - Ronchi
R - Dependent Edema
R – JVD
Medications
MI

CP / SOB (20%-60%)
Neurological Sx (15%-33%)
GI Sx (up to 19%)
Palpitations / arrhythmia
General weakness
Restlessness
Asymptomatic!

Atypical presentations are typical.
Type II is most common
Adult Onset
NIDDM
Level of glycemic control (<120 mg/dL)
Major comorbid factor
MEDICATIONS

- Poor Compliance
- Shared Medications
- Self-Selection
- Overdose
- Underdose
- Toxicity
- Cross-Reactions
MEDICATIONS

- Warfarin: 46%
- Oral Antiplalet: 18%
- Insulins: 19%
- Oral Hypoglycemic: 15%
- High Risk Meds: 2%
ABUSE

Physical Abuse

Neglect

Psychological Abuse

Material Abuse
DNR vs Living Will vs HCPOA

Different forms from homes & E.C.F.s

When in doubt, call a Doc.
Raise awareness
Raise understanding
Raise index of suspicion
Improve patient outcome
BASIC
- Treat with respect
- Observe environment
- In-depth assessment
ADVANCED

Assessment

12 Lead EKG

Alerts (T, C, S)

Under treat / Over treat
Don't take geriatric patients for granted. They just may surprise you!