



Branston T.
Duckworth
(Poppy)

GERIATRICS: THE SILENT MAJORITY

Rommie L. Duckworth, LP







Email:

romduckworth@NECREM.org



Twitter:

@romduck

@RescueDigest



Resources:

www.bit.ly/GeriatricEmergencies

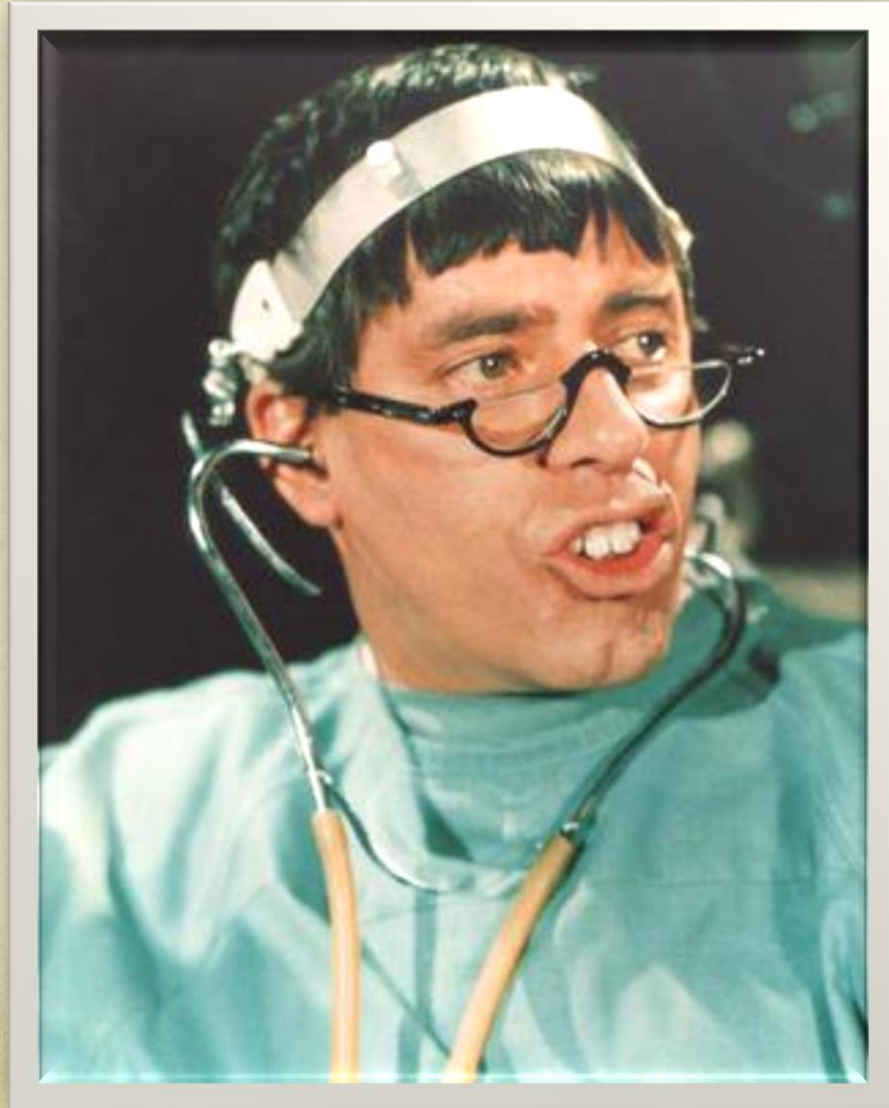


Websites:

www.RescueDigest.com

www.RomDuck.com

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.

MEANING

PROBLEM



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".

GOALS



Raise awareness

Raise understanding

Raise index of suspicion

Improve patient outcome

SENESCENCE

A sequence of six male faces in profile, showing the progression of aging from youth to old age. The faces are arranged in a row, with the youngest on the left and the oldest on the right. The skin becomes more wrinkled and the hair more graying as the age progresses.

The 1% Rule

We all age differently

Not a disease.



SKIN

Loss of collagen

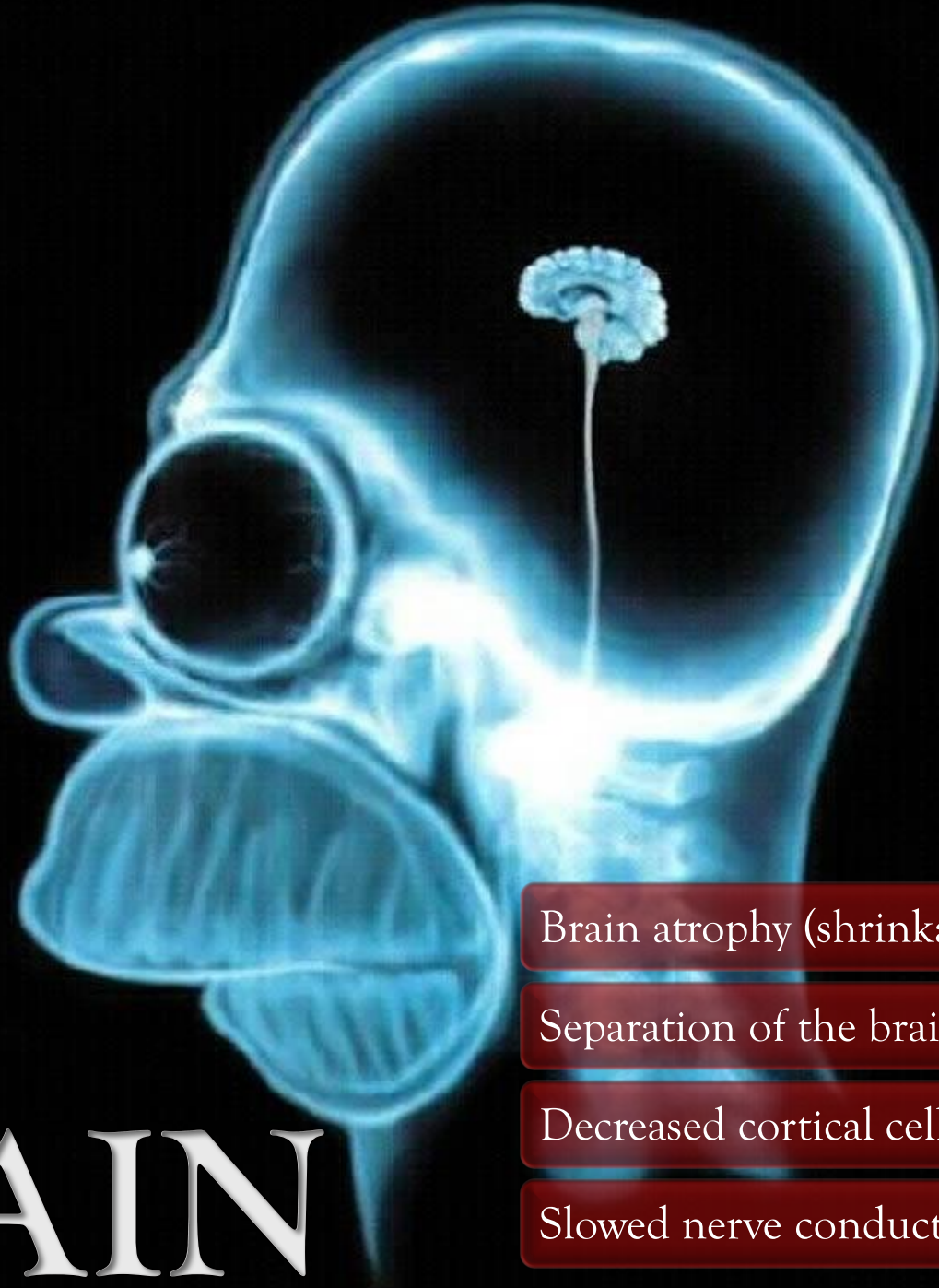
Reduced layer of fat

MUSCLE & BONE

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.

BRAIN

EYES & EARS

Decreased pupil size

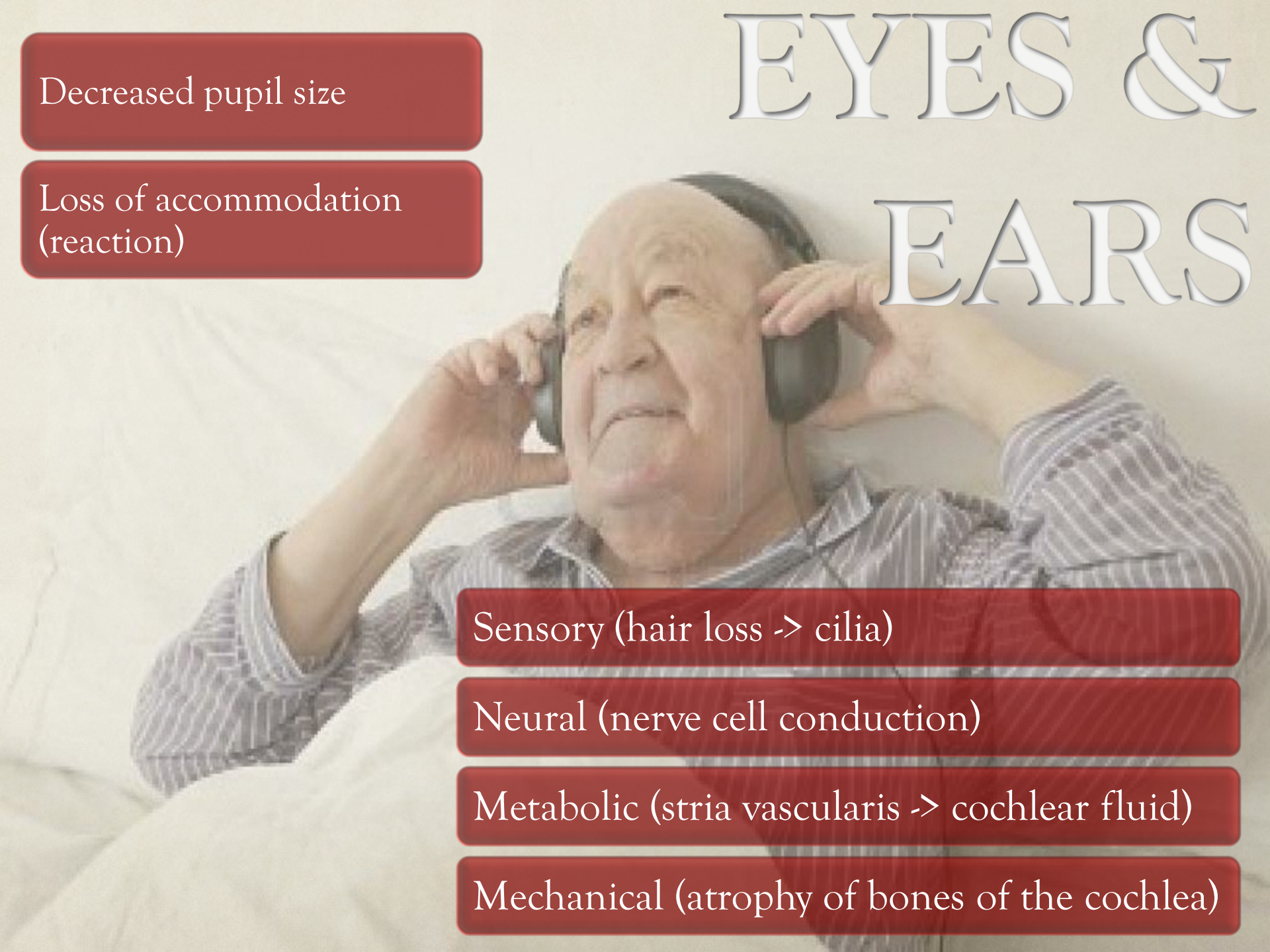
Loss of accommodation
(reaction)

Sensory (hair loss → cilia)

Neural (nerve cell conduction)

Metabolic (stria vascularis → cochlear fluid)

Mechanical (atrophy of bones of the cochlea)



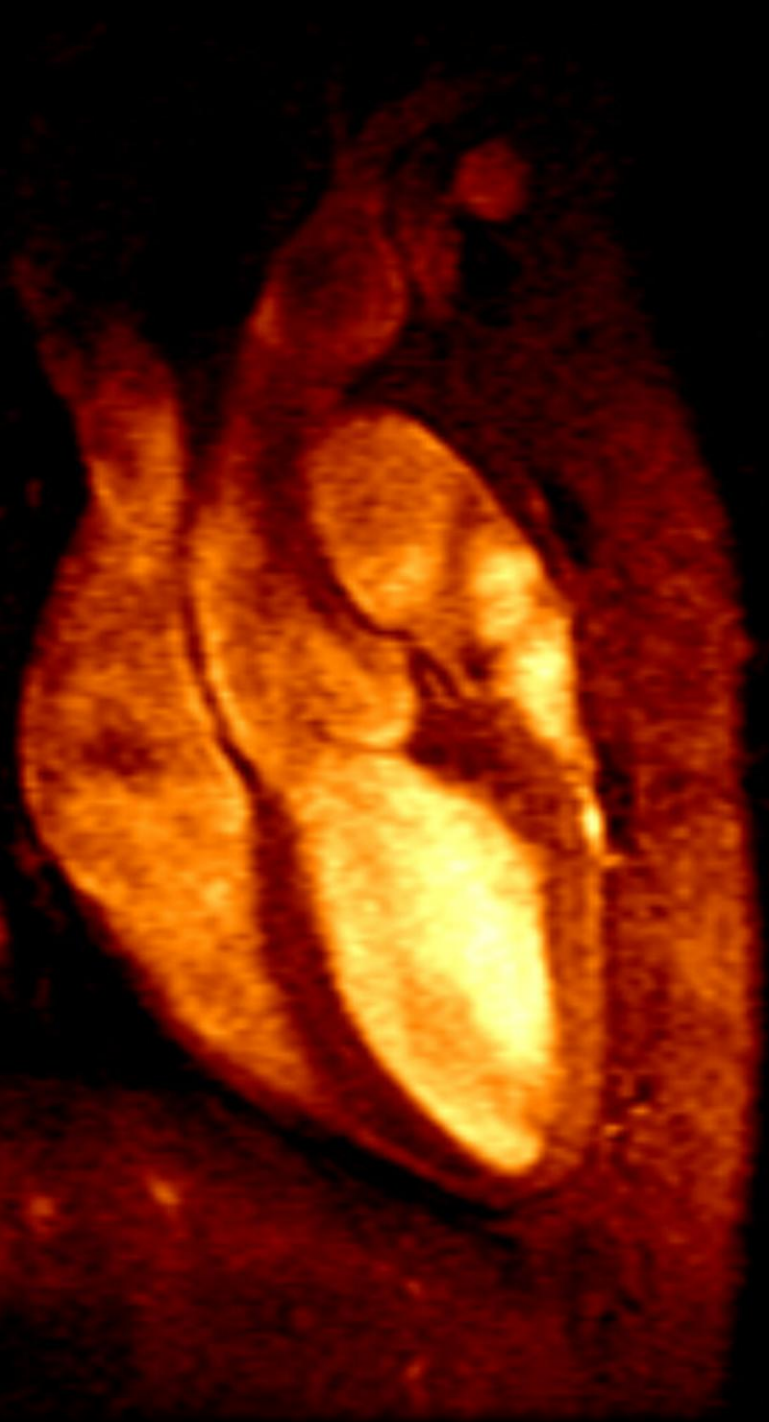
HEART

- 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



LUNGS

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

A young woman wearing a red baseball cap, a light blue long-sleeved shirt, and a dark blue apron is serving sandwiches to elderly people seated at a dining table. She is wearing clear plastic gloves and is handing a sandwich to an elderly woman in the foreground. The setting appears to be a community center or a senior center dining room, with other people seated at tables in the background. The text "GI SYSTEM" is overlaid at the bottom of the image in a large, white, serif font.

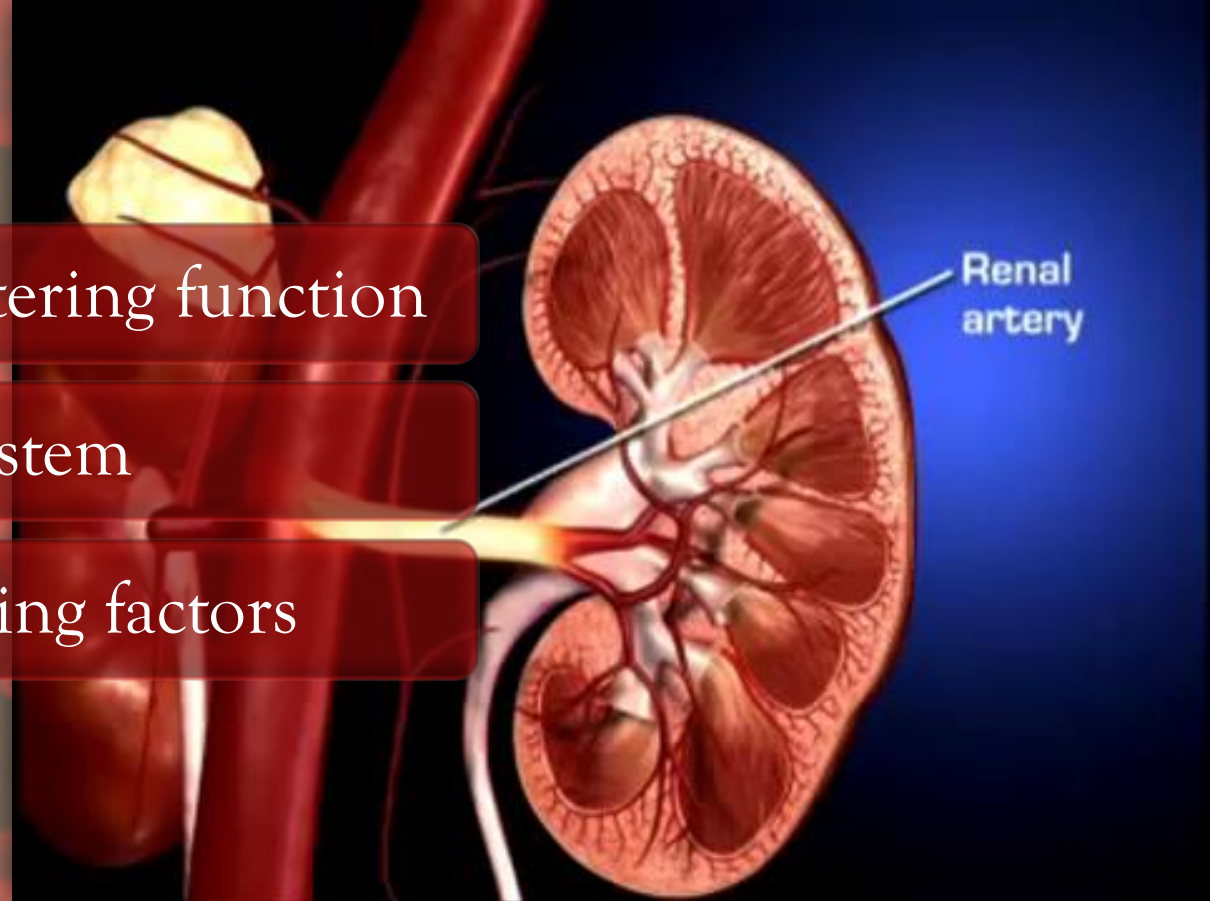
GI SYSTEM

KIDNEYS

Decreased size and filtering function

Decreased immune system

Decreased blood clotting factors



Renal
artery

& LIVER

PSYCHOSOCIAL



Decreased activity levels

Loss of family / friends

Isolation / Depression

Failure to thrive.

ASSESSMENT



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.



ASSESSMENT



Talk to family but DON'T ignore patient



The difficult elderly. Be nice.

THE MYSTERY



FALLS



5% Hospital admissions.

40% nursing home admits.

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

More total deaths and injuries than any other form of trauma for geriatric patients.

S.P.L.A.T.T.

Symptoms

Previous Falls

Location

Activity

Time

Trauma (sequelae)



MVAs

A photograph showing several firefighters in full gear (helmets, jackets with reflective stripes) providing medical aid to a patient lying on a stretcher. One firefighter is holding a clear plastic bag, possibly for oxygen or ventilation. Another firefighter is adjusting the patient's position. A third firefighter is standing nearby. In the background, a fire truck is parked on a road. The scene is outdoors, with trees and foliage visible. The overall tone is professional and focused on emergency response.

7,600 annual geriatric deaths.

More likely multi-trauma.

Poor compensation for multi-trauma.

STROKE

Cincinnati

Prehospital

Stroke

Score

Face



Arm



Speech



Time

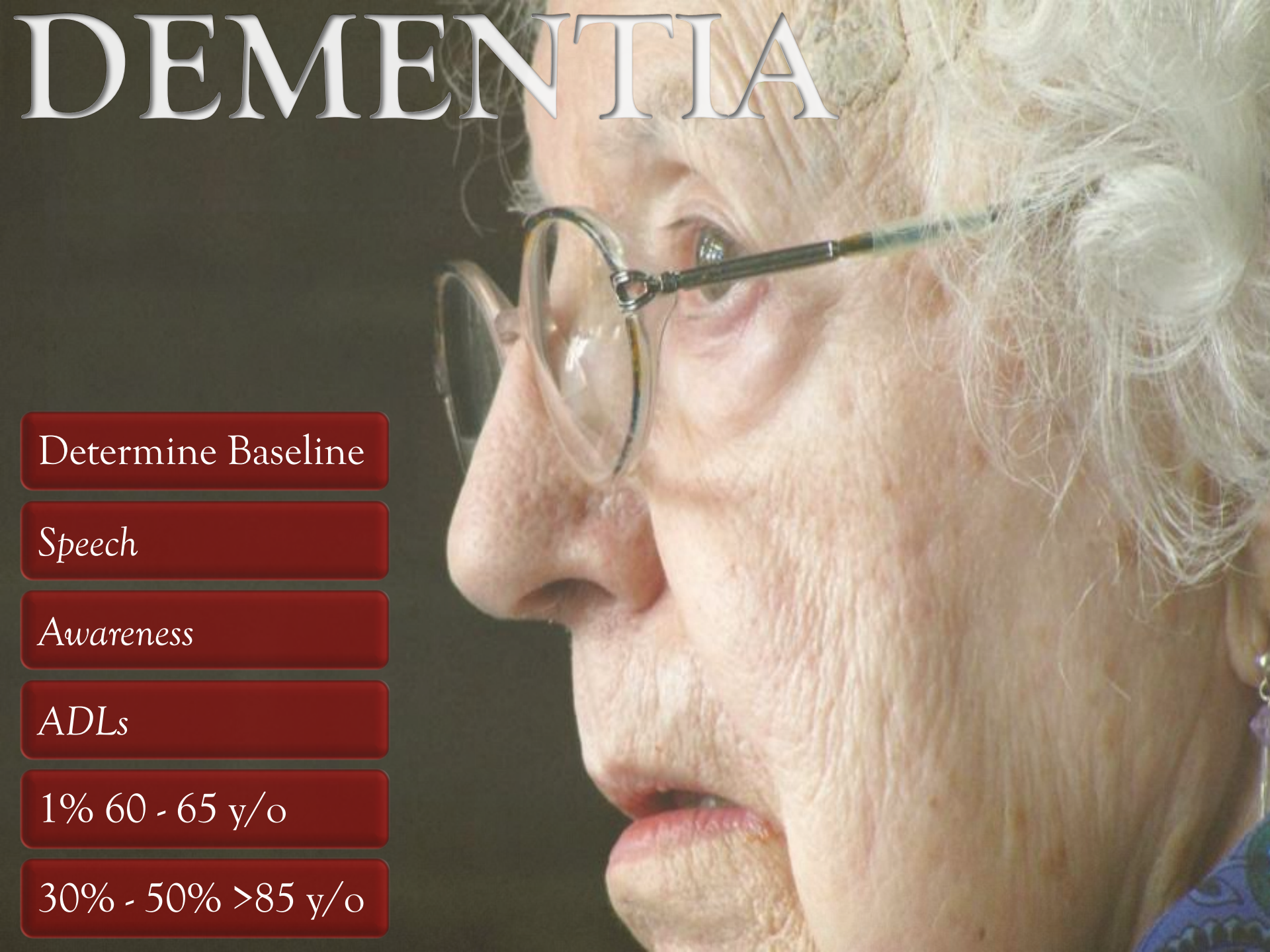


Is it a stroke?

Check these signs
FAST!

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

DEMENTIA

A close-up, profile view of an elderly woman with short, wavy white hair. She is wearing round, clear-rimmed glasses. Her face shows signs of aging, with wrinkles and a slightly open mouth. The background is dark and out of focus.

Determine Baseline

Speech

Awareness

ADLs

1% 60 - 65 y/o

30% - 50% >85 y/o

A – Alcohol

E – Epilepsy

I – Infection

O – Overdose

U- Uremia

T – Trauma

I – Insulin

P – Poisoning

S – Stroke



PARKINSON'S



Most common cause of parkinsonian Sx.

Dopamine deficiency.

Treatment has many side effects.

Multifaceted, often idiopathic disorder.

Bradykinesia

Rigidity

Resting Tremor

PNEUMONIA

Bacterial infection

Increased incidence from:

Nursing homes (groups)

Poor swallowing

Decreased gag reflex

Decreased cough

Decreased immune system



PNEUMONIA

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)



COPD



CHRONIC BRONCHITIS

Increased secretion & wall thickening

CHRONIC EMPHYSEMA

Destruction of lung parenchyma

COPD

DIFFERENTIAL Dx

Dyspnea

Increased WOB

Wheezes

Pink Puffer

Blue Bloater



COPD




CO-FACTORS

Pneumonia

Pneumothorax

Difficulty in weaning

P.E.



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



CHF

AMS

CP

DOE

HTN

L - Pulmonary Edema

L - Orthopnea

L - Ronchi

R - Dependent Edema

R - JVD

Medications



CHF

MI



CP / SOB (20%-60%)

Neurological Sx (15%-33%)

GI Sx (up to 19%)

Palpitations / arrhythmia

General weakness

Restlessness

Asymptomatic!

*Atypical presentations
are typical.*

Name:

ID:

Patient ID:

Incident:

Age: 68

12-Lead 1

HR 41 bpm

11:22:51

PR 0.000s

QRS 0.092s

QT/QTc

0.522s/0.430s

P-QRS-T Axes

0° 4° 96°

Sex:

aVR

I I

III III

aVL

IV2

IIII IIII

aVF

IV3

x1.0 .05-40Hz 25mm/sec

GI

Upper G.I.

Lower G.I.





Type II is most common

Adult Onset

NIDDM

Level of glycemic control (<120 mg/dL)

Major comorbid factor

DM

A close-up photograph of an elderly person's face, showing deep wrinkles and a serious expression. The person is wearing a black hat with a wide brim. The background is slightly blurred, suggesting an outdoor setting.

CI

Affective Disorders (Depression)

Paranoid Disorders

Neurotic Disorders (Anxiety)

AMS: AEIOU-TIPS

MEDICATIONS



Poor Compliance

Shared Medications

Self-Selection

Overdose

Underdose

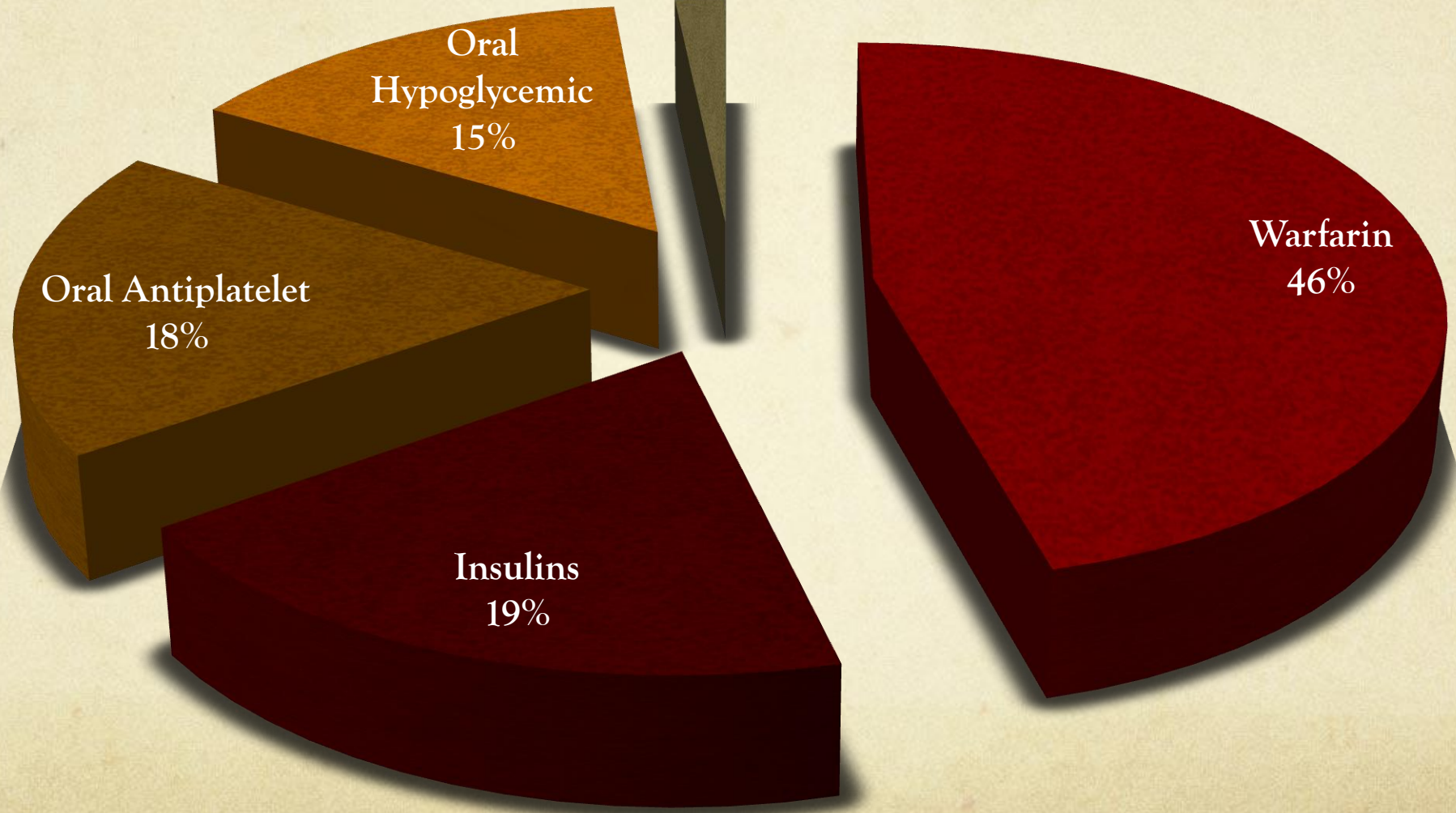
Toxicity

Cross-Reactions

MEDICATIONS

High Risk Meds

2%



ABUSE

Physical Abuse

Neglect

Psychological Abuse

Material Abuse



DNR



DNR vs Living Will vs HCPOA

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

When in doubt, call a Doc.

GOALS



Raise awareness

Raise understanding

Raise index of suspicion

Improve patient outcome

REMEMBER

BASIC

Treat with respect

Observe environment

In-depth assessment

REMEMBER



ADVANCED

Assessment

12 Lead EKG

Alerts (T, C, S)

Under treat / Over treat



Just
15
minutes
Gaps



Email:

romduckworth@NECREM.org



Twitter:

@romduck

@RescueDigest



Resources:

www.bit.ly/GeriatricEmergencies



Websites:

www.RescueDigest.com

www.RomDuck.com