

Helping Patients Live To Be 100 Years Old

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Disclosures

I have no relevant relationships with ineligible companies to disclose within the past 24 months.

Note: Ineligible companies are defined as those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Overview

- Physiological and Psychological Changes as we advance in years
- Pharmacologic considerations when working with the elderly
- Factors affecting mobility, function, independence, quality of life, etc.
- What is most important to individual patients as they age?
- What is our role as Providers in treating, educating and supporting our patients and their families?
- A discussion of End-of-Life planning and care





Physiological changes with age

“All people age, but not at the same rate”

Every system ages with unique processes.

Compared to age 30, persons aged 75 have:

92% of their brain weight

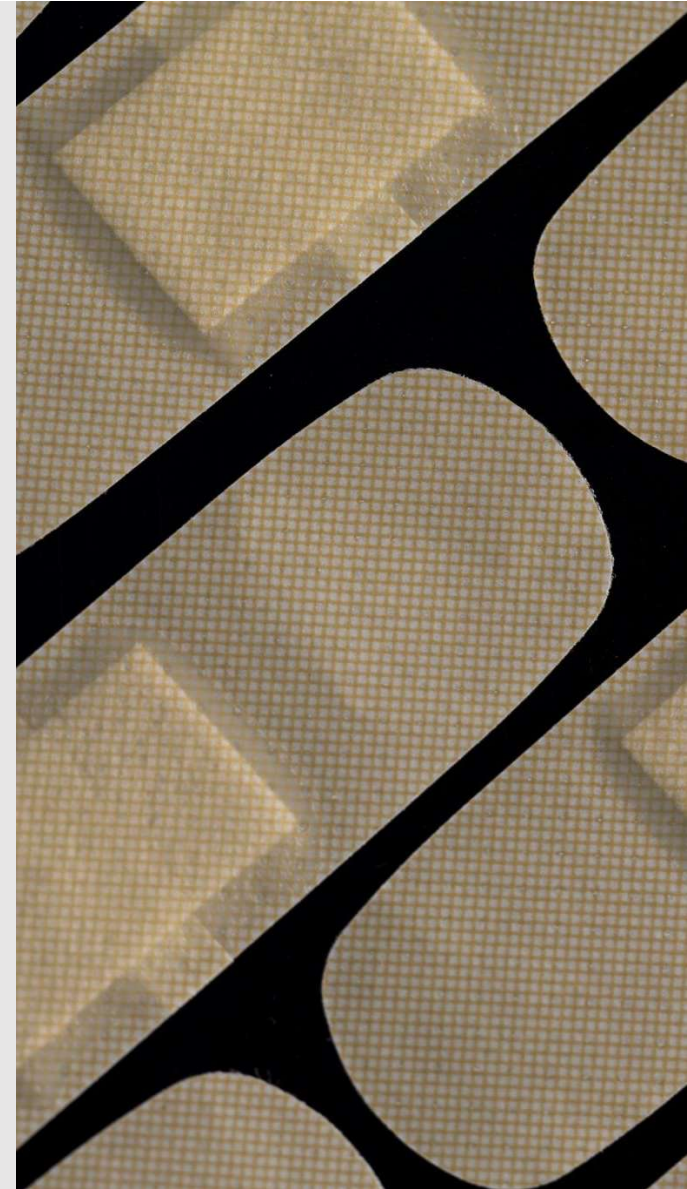
84% of metabolism

70% GFR

43% Maximal Breathing Capacity

Skin changes

- loss of subcutaneous fat provides less insulation to cold
- atrophy of sweat glands
- thickening of nails
- skin becomes thinner
- by age 40 facial wrinkles start to develop from most frequent expressions
- more susceptible to dryness, broken blood vessels, slower healing
- Intrinsic: gravity, genetics
- Extrinsic: smoking, alcohol, diet/lifestyle, etc. photoaging





GI Changes

- decreased motility of gut
- diminished response to pain/referral (ex. Perceived pain in stomach may be originating from lower GI tract)
- weakening of colonic muscular walls cause diverticula
- malabsorption of iron, calcium, vitamin D – achlorhydria

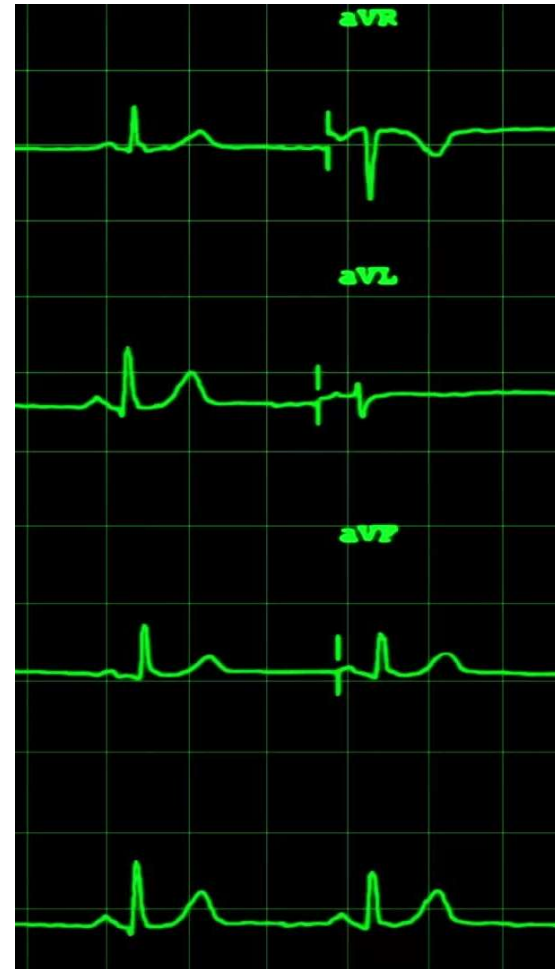
- Many GI symptoms also have origins in psychosocial factors, as well as secondary to medications as s/e's

GU Changes

- urinary bladder has less than $\frac{1}{2}$ previous capacity
- micturition reflex felt only when bladder nearly full, opposed to when half-full as when we are younger.
- typical to have 100cc residual
- female genitalia – decreased elasticity, decreased secretions and # glands, uterus more fibrous, cervix smaller in size. System: ovulation stops
- male genitalia – testes decrease in size and firmness, fibrosis may decrease erection ability. System: testosterone decreased
- and, incontinence (stress vs. urge – can be multifactorial, etc.)

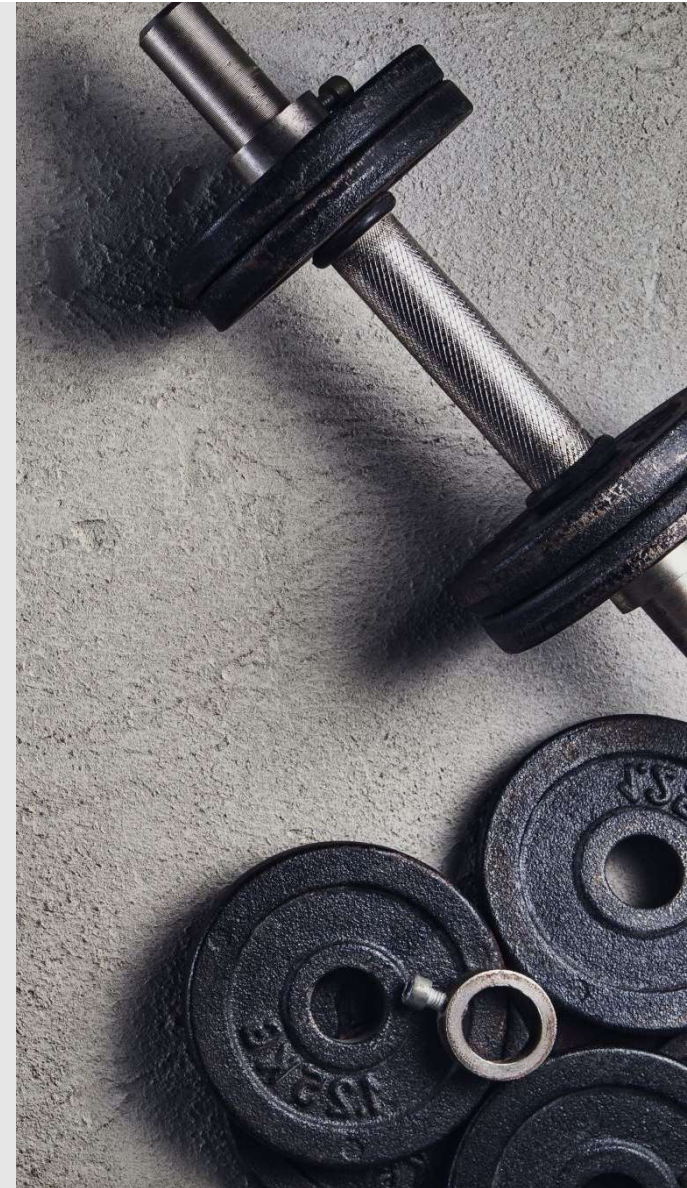
Cardio/Respiratory changes

- heart valves thicken
- atherosclerosis (narrowing of vessels due to plaques)
- arteriosclerosis (loss of elasticity of vessel walls)
- airways and tissues less elastic with age – osteopenia may alter shape of chest cavity
- power of respiration and abdominal muscles also reduced



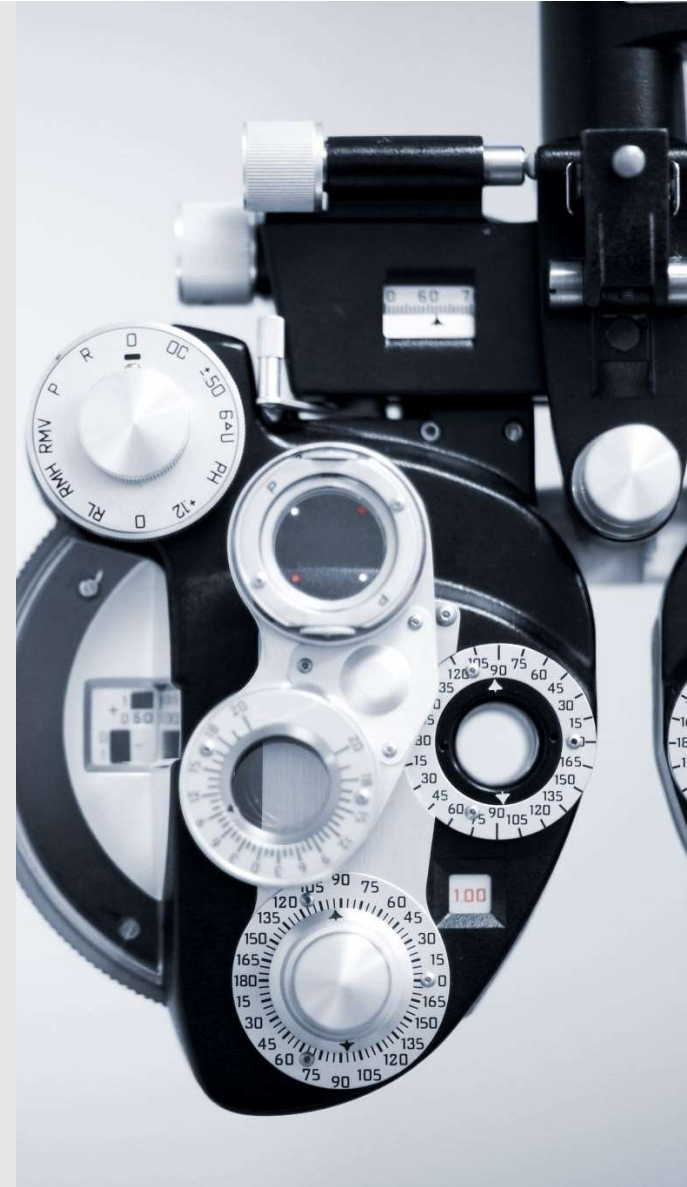
Muscle/Weight changes

- Men gain wt until age 55, then lose weight due to decrease in testosterone
- Women gain until 67-69 and then lose weight
- Wt loss occurs due to fat replacing lean tissue, which builds toward the center of the body and can surround internal organs
- * Decrease in muscle mass is associated with weakness, disability and morbidity
- Concomitantly a decrease in bone mass and increase in adiposity is seen



Perception

- * Mechanoreceptor changes: system that detects mechanical stimuli like touch, sound, pressure, stretching, motion – decreases in acuity with aging – this leads to difficulty in balance
- 75% of persons over 80 have hyposmia (decreased ability to smell or detect odor)
- Visual changes/deterioration – multiple forms and causes
- Hearing loss – multiple types/causes



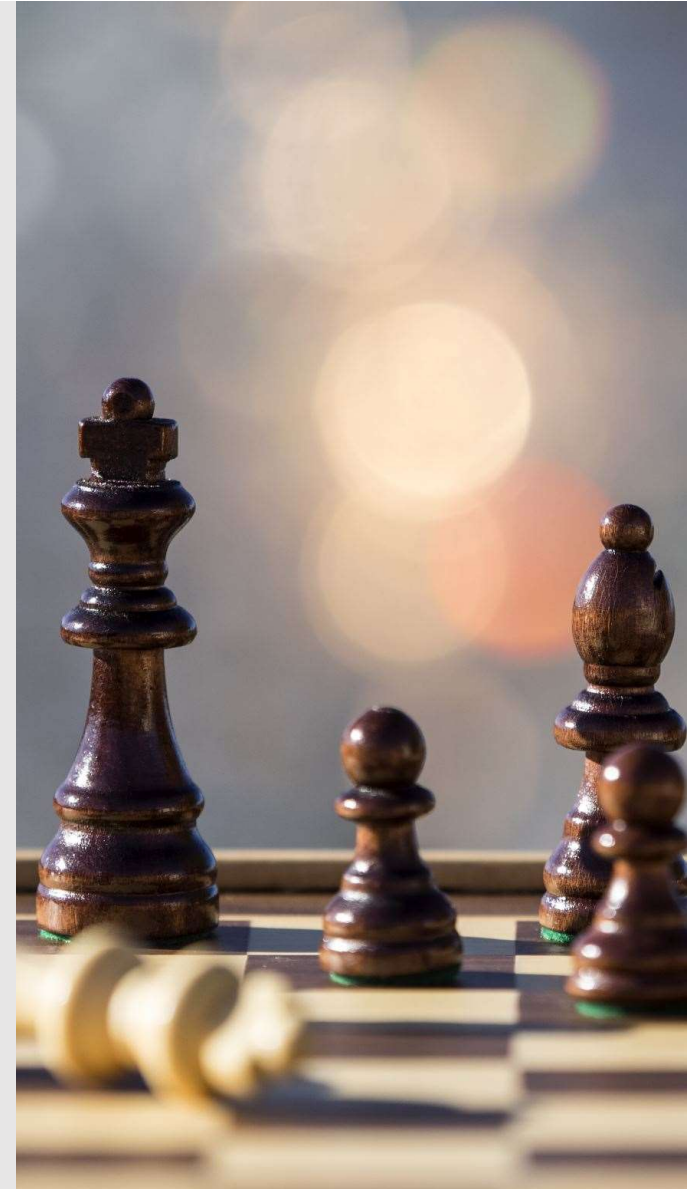
Obesity in the Elderly

- Linked with depression
- There are hereditary causes
- Linked with poor sleep
- Associated with steroid use
- Can cause/contribute to joint pain, which contributes to decreased mobility, decreased activity, etc.



Psychosocial changes

- Role change in family, “empty nest”
- Loss of independence
- Loss of job, identity for some
- Grieving losses of close loved ones
- Fear of mortality
- Susceptibility to isolation, depression





Helping patients
live better lives

Building a Therapeutic Partnership

- Inspiring Patients
- Building Rapport
- Active Listening
- Include Milestones in Notes
- Empower Patients to Take the Wheel





What is "well-being?"

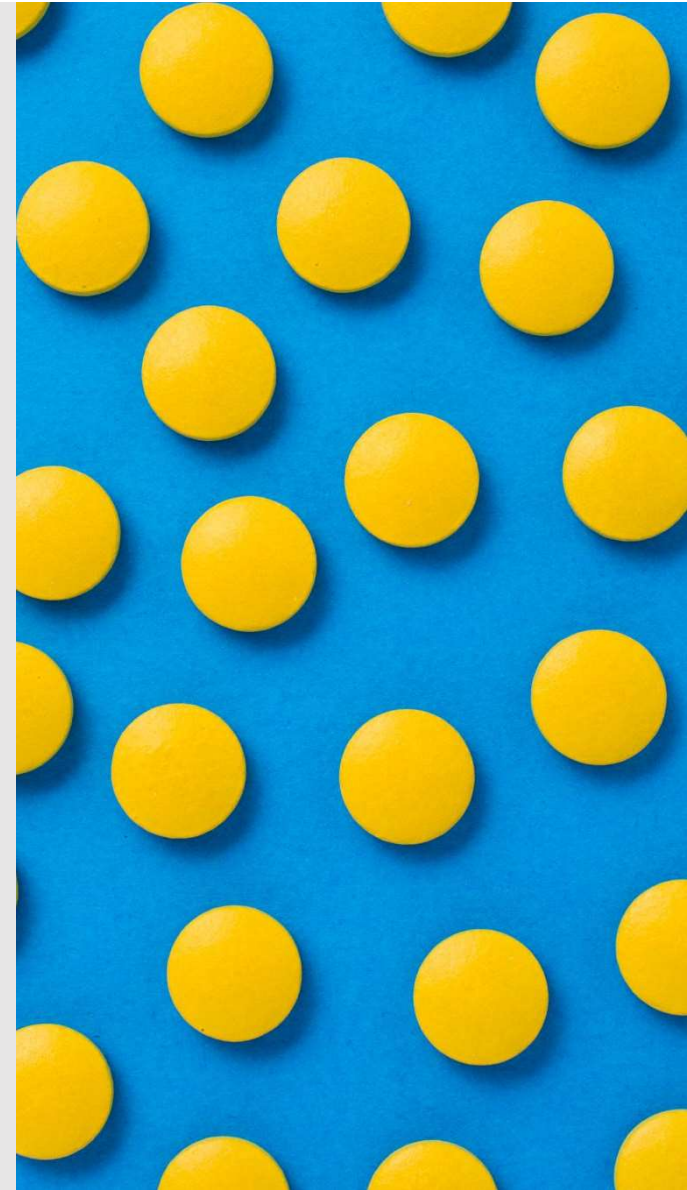
- Social:
- Psychological:
- Physical:



Optimizing Mental/Cognitive Health

Pharmacological issues

- Use of anticholinergics
- Use of excessive medications
- Use of benzodiazepines
- Black Box warnings: Antipsychotics/Mood stabilizers, etc.
- Statins
- Dopaminergic medications
- Informed consent





End-Of-Life



Clarify goals of treatment, prognosis
Focus on pain control, providing comfort
Counseling and resources for caregivers
Eliminate unnecessary medications
Manage behaviors to minimize injury/hazard
Nutritional concerns
Consider hospice services

THANK YOU!

References

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