

Preventing Falls and Keeping Your Independence

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Brief Bio

Medical Family

Born and raised in Houston

Undergrad: UT Austin

Med School: Baylor College of Medicine

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Started working at BCH 9/2024



Why Geriatrics?





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- Falls are common. $\frac{1}{4}$ older adults fall yearly
- Common cause of hip fractures, TBIs
- Cost of non-fatal falls: 80 BILLION
- Cost of non-fatal falls in 2030: >101 BILLION

is EVERYONE's Responsibility!

- Saves money
- Patients want:
 - To stay in community home
 - Independence
- Kids want independent parents



- The biomechanics of balance
 - Vision
 - Brain
 - Ear
 - Blood pressure
 - Muscles
 - Proprioception (the sensation of our body in space)
 - Skin sensitivity
 - Environment

visual

Spatial, motion and depth perception
Eye coordination
Stable Gaze
Clear Vision



brain

The brain receives the information processes it, sorts it, and integrates it.



vestibular

Rotational movement
Linear movement
Equilibrium
Gravity



Brain sends impulses to the muscles that control movement, to coordinate posture and balance.

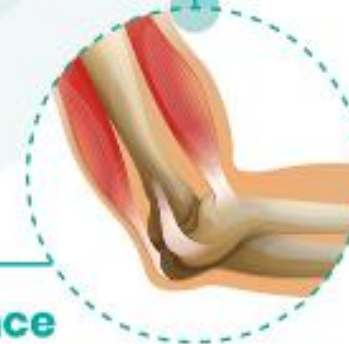


proprioception

Sense of body positioning
Joints
Muscles
Skin

balance

Balance is maintained by the complex system of sensory inputs and motor control.



Look for weak spots in your system

- Brain:
 - Alcohol/THC
 - Neurologic conditions
 - Medications
 - Brain fog
 - Low blood pressure
 - Balance risk
 - Antidepressants/Anxiety meds



Preventing Falls

- Vision:
 - Double/blurry vision,
 - Glaucoma
 - Cataracts
 - Temporal Arteritis
 - Light sensitivity/impairment



Preventing Falls

- Internal balance center
 - Vertigo
 - Medications
- Low blood pressure
 - Medications
 - *DEHYDRATION*
 - Swelling



- >4 prescription medicines increases risk of falls
- Decreased kidney function/liver function as you get older potentiates side effects



Preventing Falls

- Neuropathy
- Chronic pain/Arthritis
 - Control pain
 - Watch for medication side effects



Preventing Falls

- Urinary symptoms
 - Avoid and treat urgency
 - Scheduled toileting
 - Sanctura
 - Treat constipation
 - Design nights with safety in mind



Preventing Falls

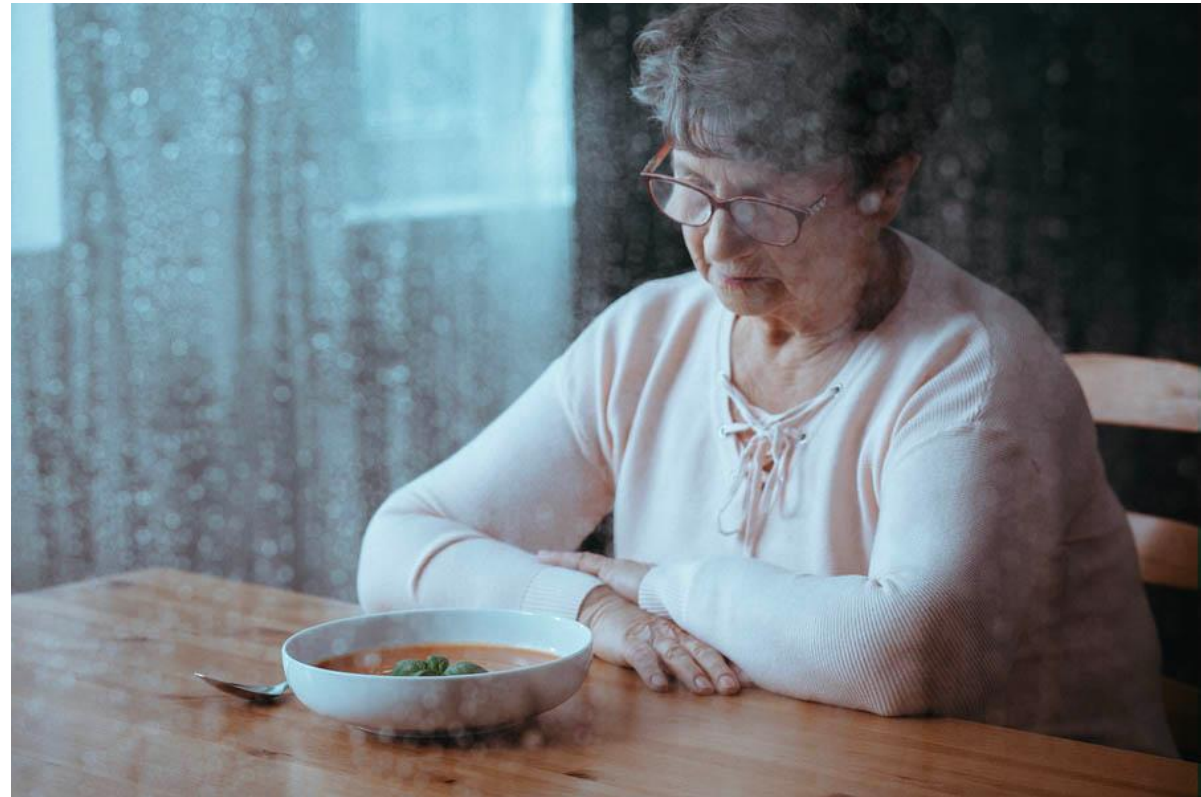
- Environmental controls
 - Avoid unstable ground
 - Footwear
 - Avoid small rugs
 - Low tables
 - Uncontrolled pets
 - Roller chairs
 - Ice/snow
 - Handrails



*The only thing we
have to fear is fear
(of falls) itself
-FDR, probably*



- Sarcopenia
- Weight Loss
- Vitamin D deficiency



Preventing Falls - Offensive

- Physical Activity
 - Cardio
 - Stretching
 - Strength
 - Balance
 - Tai Chi



- Maximize Tylenol, Voltaren Gel, safe methods of pain control
- DC Diuretics, benzos, anticholinergic meds, (oxybutynin, Benadryl), gabapentin (trial alphalipoic acid), Paxil
- Inquire about sleep aids, supplements
- Lower Synthroid (Goal TSH 3-7, contributes to weight loss)
- Push, but not too hard. Meet halfway
- Check weights, Vitamin D, orthostatics
- Screen for osteoporosis

Geriatrics Team



THIS IS GERIATRICS!!!!



Questions?



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