



Geriatrics

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The elderly are not just old adults!



Problems

- **Multiple** medical problems
- Often caused by changes in physiology as a normal part of the aging process
- Polypharmacy



Skin

- Wrinkled, thinner, more prone to injury
- Less sweat glands – hyperthermia risk
- Less elastic – more prone to bruises and lacerations



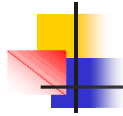
Senses

- Cataracts
- Hearing loss/balance problems
- Loss of teeth/poorly fitting dentures
 - Airway problems
 - Digestion problems
- Decreased sensitivity to pain
 - May not feel the pain of a serious illness



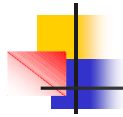
Respiratory system

- Decreased elasticity/lung surface area
 - Decreased O₂ and CO₂ exchange
- Impaired ability to cough
 - Decreased ability to remove mucus...
 - More prone to infection



Cardiovascular system

- **Syncope**
- Decreased cardiac output
- Increased workload on the heart
- Decreased exercise tolerance
- Cholesterol buildup (atherosclerosis)



Cardiovascular system

- Hardening of the arteries (arteriosclerosis)
 - Hypertension
 - MI
 - CVA
 - Bowel infarction
 - Aneurysm
- Atrial fibrillation
- Valvular disease



Nervous system

- Number of brain cells can be decreased by up to 45%
- Loss of brain mass
 - More prone to serious head trauma
 - CVA/TIA
- Parkinsons disease
- Dementia
- Syncope



Genito-urinary/renal system

- Loss of 30-40% of kidney function
 - Electrolyte/fluid imbalance
- BPH / urinary retention
- Urinary incontinence



Musculoskeletal system

- Decreased muscle mass
- Bones more easily fractured
- Arthritis
- Osteoporosis



GI system

- Decreased GI motility, taste buds, saliva production
 - Malnourishment
 - Constipation
 - Diverticulitis
- Decreased liver function
 - **Increased "clearing times" for drugs**
 - **Accidental overdoses**
- **AAA**



Endocrine system

- Diabetes
- Thyroid disorders
 - Hypothyroidism
 - Heat regulation problems



Psychiatric

- **Depression**
- **Does it surprise you?**



Geriatric assessment

- Same as for adults, modify PRN
- **Only one person to ask the questions!**
- Speak as loudly as needed, slowly and clearly
- Get down to their level; establish eye contact
- **RESPECT!**
 - **Don't call them by nicknames**



Geriatric assessment -- 2

- **Observation**
 - **A key element in the assessment**
- Avoid complicated questions
 - Use "Yes/No" questions if appropriate
 - Use "open ended" questions as much as possible
- **Always assume a medical component of any trauma case**
- **Don't assume that AMS is normal for them...**
 - Try to find out what their baseline mental status is



Common emergencies

- Syncopy – many causes
- Cardiac arrhythmias
 - Rate too fast; slow; irregular
 - **Blood flow to the brain is insufficient**
- **MI**
- Vasodilation
 - **Often due to medication interactions**
 - **Septic shock**



Common emergencies -- 2

- Volume depletion
 - GI bleed
 - Aneurysm
 - **Sweating**
- Neurological
 - CVA/TIA



MI in the elderly

- **Elderly often do not experience classic MI S/S**
- **Look for:**
 - **Syncope**
 - Extreme weakness
 - Dyspnea
 - Nausea/vomiting
 - Sweating
 - Altered mental status