Geriatric History and Physical Examination

History

1. First assess whether patient can adequately understand/respond to questions (avoid causing discomfort or indignity)
   - Hearing
     - Screen for hearing loss
       - Hearing loss can be accurately assessed using simple questionnaires
       - Pts with chronic otitis media, sudden hearing loss, or who fail any screening tests should be referred to otolaryngologist (SOR:C)
     - Counsel on hearing aids
       - Hearing aids are treatment of choice for older patients with hearing impairment (SOR:A)
     - See Hearing impairment
   - Vision
     - High prevalence of under-corrected visual impairments
     - Most common vision impairments
       - presbyopia
       - glaucoma
       - diabetic retinopathy
       - cataracts
       - age-related macular degeneration (ARMD)
     - See Visual impairment
   - Cognitive abilities
     - Complaints of memory loss should be evaluated and followed for progression
   - Caregiver
     - Confirm / obtain info from family or caregiver
       - Assess and follow carefully if cognitive decline described
       - Informant-reported memory loss is typically more reliable than patient-reported memory loss

2. Diet, nutritional assessment
   - Screen for weight loss,
   - Nutrition screening questionnaire
     - Simplified Nutrition Assessment Questionnaire (SNAQ)
   - Consider nutrition referral if pt at risk for weight loss >5% in 6 months according to questionnaire

3. Functional status
   - Assess ability to perform activities of daily living (ADLs)
     - Bathing, dressing, toileting, continence, feeding, transferring
   - Instrumental ADLs
     - Food preparation, shopping, housekeeping, laundry, finances, medication, use of telephone and transportation
   - See Functional assessment
4. Affective disorders, depression
   - See Depression scale

5. Health maintenance
   - Gait abnormalities, falls
     - Leading cause of death from injury
     - Results from decrease in vision, balance, sensory perception, strength and coordination
     - Often precipitated by meds
     - See Falls
   - Sleep difficulties
     - See Insomnia
   - Dental, vision, medical checkups
   - Education regarding smoking cessation
   - Screening for prostate, breast, cervical and colorectal cancers
     - Prostate cancer screening
       - Screening in men greater than 75 years of age is discouraged (USPSTF D recommendation)
     - Breast cancer screening
       - Biennial screening mammography recommended for women ages 50-74 (USPSTF B recommendation)
       - USPSTF concludes that evidence is insufficient to recommend for or against screening mammography for women 75 and older (USPSTF I recommendation)
     - Cervical cancer screening
       - Screening is discouraged in women over the age of 65 who have had adequate recent screening and are at low risk for cervical cancer (USPSTF D recommendation)
       - Routine screening discouraged in women who have had a hysterectomy for benign disease (USPSTF D recommendation)
     - Colorectal cancer screening
       - Using fecal occult blood testing, sigmoidoscopy, or colonoscopy recommended from 50-75 years of age (USPSTF A recommendation)
       - Screening from age 76-85 may not be helpful (USPSTF C recommendation)
       - Screening from age older than 85 years old is discouraged (USPSTF D recommendation)
     - See Cancer screening
   - Osteoporosis
     - Bone mineral density testing
       - USPSTF recommends screening in women 65 and older (USPSTF B recommendation)
       - See Osteoporosis
   - Immunizations
     - Td, influenza vaccine, pneumococcal
Summary of recommendations\(^\text{12}\) See Immunizations

- Medication issues, polypharmacy
  - Ask patients to bring medications or a list
  - Determine creatinine clearance when drugs are taken that depend on renal excretion

6. Sexual history
   - Prior and present sexual partners
   - Exposure to sexually transmitted diseases

7. Substance Abuse (past and current)
   - Alcohol use
   - Illicit drug use
   - Overuse/misuse of over-the-counter medications
   - Tobacco use

8. Support systems
   - Social interactions, hobbies
   - Family, community support

9. Caregiver issues
   - Ability to take care of patient
   - Abuse/ neglect
   - Need for assisted living/nursing home

10. Advanced directive discussion
    - Living Will
    - Power of Attorney (durable/medical)

Physical Exam
1. See also Adult H&P
2. Vital signs
   - See Age-related tables
   - Predisposition to hypothermia due to decreased amount of subQ tissue
     - Geriatric patients with infection may have normal temperature
3. Skin
   - Reduced skin turgor
   - Atrophy of epidermis, hair follicles and sweat glands
     - Loss of skin elasticity and collagen
     - Thinning of skin
     - Hair loss
     - Prolonged time to heal due to decreased vascularity of dermis
   - \textit{Senile lentigo/lentigines} (liver spots, solar lentigo, old age spots)
     - Brown macules on hands, forearms, face
     - Caused by localized epidermal hyperplasia and increased melanin production
     - Common in those age >40, especially those with sun exposure
     - Considered benign
   - \textit{Solar keratosis}
     - Raised yellow-brown horny papule/ plaque on ears, neck, trunk, hands
- Epidermal hyperkeratosis
  - **Senile purpura**
    - Extravasated blood from capillaries that have lost elastic support
    - Usually on hands and forearms
    - Due to trauma (even minor/minimal)
    - Secondary to sun-induced damage to connective tissue
  - Sebaceous gland hyperplasia
    - Yellowish glands with central pore
    - Forehead, nose
  - Pressure sores (decubitus ulcers)
    - Reposition every 2 hrs
    - Minimize moisture, esp. if incontinent
    - Routine skin care
    - Improved nutrition
  - Signs of malignancy, abuse, falls

4. Head and neck
   - Evaluate for signs of trauma, falls
   - Palpate temporal arteries for pulse, scalp tenderness:
     - Giant cell arteritis
       - Unilateral vision changes
       - Headaches
       - Jaw pain
   - Assess for carotid bruits
   - Palpate thyroid
   - Check for facial asymmetry

5. Eyes
   - Ptosis: laxity of eyelids
   - Arcus senilis
   - Nystagmus
   - Corneal ulcers, keratitis, dry eyes
     - Decreased tear production
   - Presbyopia
     - Loss of lens elasticity
   - Decreased visual acuity
     - Macular degeneration, floaters, cataracts

6. Ears
   - Check hearing by occluding one ear and whispering or rubbing fingers together near unoccluded ear
   - Impaired high-frequency tone hearing most common
   - Conductive deafness: otosclerosis
   - Dizziness: hair cell degeneration
   - Check for cerumen impaction

7. Nasopharynx / oropharynx
   - Decreased taste/ smell
   - Fitting of dentures, remove dentures for oral exam
   - Decreased mucus production (age-related xerostomia)
8. Respiratory
   - Increased risk of URIs
     - Voice changes from loss of vocal cord elasticity
     - Tooth loss, gum recession, dryness of mouth
   - Decreased vital capacity
     - Loss of lung elasticity
     - Alveolar atrophy
   - Kyphoscoliosis
   - Decreased mucus production
     - Susceptibility to infections

9. Cardiac
   - Systolic murmurs in >50% geriatric Pts
   - Aortic dilatation, regurgitant valves
     - Loss of elasticity
   - Stenotic valves, heart blocks/arrhythmias
     - Degeneration, sclerosis
     - Aortic stenosis most common murmur in elderly
   - Hypertension
     - Noncompliant arteries
   - Atherosclerosis
   - Loss of peripheral pulses common

10. Breast
    - Increased fatty tissue
    - Gynecomastia in males
    - Increased incidence of cancer with increasing age

11. Gastrointestinal
    - Altered secretion, motility, and absorption
      - Mucosal atrophy
    - Diverticulosis
    - Chronic constipation
    - Femoral and Inguinal hernias
    - Rectal exam
      - Check stool for occult/gross blood
    - Increased half-life of lipid-soluble drugs
      - Decrease in hepatic mass and blood flow

12. Genitourinary
    - Decreased GFR
      - Decrease in renal function and renal blood flow
    - Assess bladder
    - Examine for signs of sexually transmitted diseases
    - Prostatic nodules or hypertrophy
    - Vaginal dryness, atrophy, thinning - usually due to estrogen deficiency

13. Endocrine
    - Hypothyroidism
    - Hyperglycemia (diabetes)
    - Decreased secretion of hormones
14. Musculoskeletal
   o Assess strength and tone
     ▪ Often see generalized muscle atrophy
     ▪ Decreased strength
   o Polymyalgia rheumatica
     ▪ Proximal muscle strength weakness
     ▪ Symmetric pain and weakness
   o Increased osteoclastic activity
     ▪ Thinning of bone, osteoporosis
   o Decrease in height, kyphoscoliosis
   o Joint stiffness, arthritis leads to decreased ROM
   o Assess feet or nail care, calluses, deformities and ulcerations, esp if diabetic

15. Nervous System
   o Check mental status
   o Evaluate speech for aphasias
     ▪ Wernicke’s (sensory), Broca’s (expressive), global
   o Evaluate resting motor dysfunction
     ▪ Tremor, twitching, jerking, chewing
   o Dementia
     ▪ Screening: Insufficient evidence to recommend for / against routine screening in older adults
     ▪ CVA
       ▪ Sudden onset
     ▪ Alzheimer's Dz
       ▪ Insidious onset, often family Hx
     ▪ Parkinson's Dz
       ▪ Rigidity and bradykinesia
     ▪ Normal pressure hydrocephalus (NPH)
       ▪ Spastic gait, urinary incontinence
     ▪ Tumor
     ▪ Subdural hematoma
       ▪ Can develop after a fall
   o Check reflexes, vibration sense
     ▪ Asymmetric reflexes may be due to CVA, myelopathy
   o Evaluate gait
     ▪ Assess need for rehab / physical therapy
     ▪ Assess mobility "Get up and Go" test
       ▪ Have Pt sit in chair, then rise, walk 10 ft
       ▪ Note hand use, ataxia, ease of turns
       ▪ Normal time is 7-10 seconds
   o Romberg test-positive test can indicate increased risk of falls
     ▪ Examiner stands behind patient
     ▪ Pt's feet together, arms out with palms up
     ▪ Have patient tilt their head back and close their eyes
If patient starts to lose balance, have them open both eyes
  • Lack of balance without visual clues (eyes closed) points to dorsal column lesion
  • Lack of balance while eyes open points to cerebellar lesion
    o Rapid alternating movements

16. Hematologic
  o Decreased bone marrow, blood cell production

17. Immune
  o Decreased T cell number and proliferation
  o Impaired humoral immunity – B cells/antibodies
  o Check for lymphadenopathy

**Challenges of Geriatric Patients**

1. Altered presentation of disease
   o Majority of pts over 70 do not have chest pain w/ MI
     • Present with SOB, falls, confusion, palpitations
   o Hyperthyroidism often presents as depression, apathy rather than tachycardia, sweating, and anxiety

2. Nonspecific presentation of disease
   o Not acting like themselves or confusion may be only symptom of an underlying disease (including infection)

3. Underreporting of conditions
   o Patients conclude symptoms are normal for people their age

4. Multiple underlying pathologies may confuse the picture

5. Multiple medications
   o Evaluate for adverse side effects/interactions
   o Goal for treating geriatric patients is often not to cure disease, but to preserve patient's quality of life – need to discuss and negotiate goals with patient

6. Difficult social situations often require a multidisciplinary approach

**Clinician Resources**

1. End of Life/Palliative Education Resource Center
   http://www.eperc.mcw.edu/EPERC/FastFactsandConcepts

2. Geriatric Assessment Tools and Readings
   http://geriatrics.uthscsa.edu/resources.asp

**References**


Author: Caleb Workman, DO,
United Hospital Center Program, WV

Editor: Robert Marshall, MD, MPH, MISM, CMIO,
Madigan Army Medical Center, Tacoma, WA