Chapter 32 Caring for the Elderly Client
Physiological Changes and Adaptations
° Terms: ego integrity vs despair, gerontology, health conditions
° Activity and exercise
° Blood and lymphatic system
  o Normal changes
    • Slight thickening of plasma
    • Decreased RBC and WBC production with more immature T cells (and slower immune response)
  o Abnormal changes
    • Anemia
    • Leukemia
° Cardiovascular systems
  o Normal changes
    • Slight increase in size, thickening of walls,
    • Reduced cardiac output and stroke volume
    • Arteries less elastic
    • Baroreceptors less sensitive, so BP increases; possible orthostatic hypotension
  o Abnormal changes
    • Cardiovascular disease accounts for 75% of deaths after 65
    • Angina pectoris
    • Myocardial infarction
    • Coronary valve disease
    • Congestive heart failure
      ↑ Term: cardiomegaly, hypertrophies
    • Thrombophlebitis
    • Peripheral vascular disease
      ↑ Term: intermittent claudication
      ↑ Venous stasis
      ↑ Varicose veins
      ↑ Aneurysms
      ↑ Hypertensive disease
° Endocrine system
  o Normal changes
    • Pituitary produces less growth hormone.
    • Possible increase in thyroid-stimulating hormone, change in metabolic rate and sensitivity to cold
    • Pancreatic function decreases with age.
  o Abnormal changes
    • Diabetes mellitus
    • Hypothyroidism
° Gastrointestinal system
  o Normal changes
    • Decreased digestive enzymes
    • Slower absorption
• Reduction in gastric pH
• Altered swallowing reflex
• Decreased peristalsis
• Teeth may loosen.

○ Abnormal changes
  • Gastroesophageal reflux disease (GERD) with hiatal hernia
  • Ulcers
  • Diverticula
  • Colon cancer
  • Hemorrhoids
  • Rectal prolapse

○ Reproductive system
  ○ Normal changes
    • In female
      ↑ Menopause, hot flashes
      ↑ Decreased elasticity of organs and tissue
      ↑ Vaginal secretions decrease
      ↑ Cervix, uterus, ovaries, fallopian, breasts atrophy
    • In male
      ↑ Decreased testosterone
      ↑ Penis may take longer to become erect.
      ↑ Benign prostatic hypertrophy (prostate gland enlargement) with frequent urination, hesitancy, decreased force, loss or urinary control, increased UTIs, decreased ejaculatory force
  ○ Abnormal changes
    • In female
      ↑ Uterine prolapse
      ↑ Yeast infection
      ↑ Breast cancer
    • In male
      ↑ Prostate cancer
      ↑ Erectile dysfunction

○ Integumentary system
  ○ Normal changes
    • Drier skin, paler (if light-skinned), more susceptible to hypothermia
    • Wrinkles, “tenting”
    • Age spots (lentigo senilis)
    • Hair pigment changes and thinning hair
    • Nail ridges; slower nail growth
  ○ Abnormal changes
    • Basal cell carcinoma
    • Dermatitis
    • Rosacea
    • Pressure ulcers

○ Musculoskeletal system
  ○ Normal changes
• Loss of calcium starting in 3rd to 4th decade, bones thinner and weaker
• Intervertebral disks shrink (can lead to kyphosis)
• Loss of height
• Decreased mobility and flexibility
• Reduced glycogen supply, buildup of cellular waste products
• Muscle spasms and fatigue
• Unsteady gait
  o Abnormal changes
    • Osteoporosis
    • Osteoarthritis
    • Rheumatoid arthritis
    • Bursitis
    • Gout
° Neurologic system
  o Normal changes
    • Decrease in efficiency of temperature-regulating mechanism
    • Decrease in body temperature and adaptability to environmental changes
    • Possible reduction in pain and touch sensation
    • Size and weight of brain decrease
    • Decreased motor response
    • Decreased sleep efficiency
    ↑ Terms: restless leg syndrome, nocturnal myoclonus
  o Abnormal changes
    • Parkinson’s disease
    • Dementia
    • Alzheimer’s disease
    • Transient ischemic attacks (TIAs)
    • Cerebrovascular attacks (CVAs)
° Respiratory system
  o Normal changes
    • Reduced ability to humidify air
    • Change in pitch and quality of voice
    • Diminished shape and size of chest cavity, calcification of cartilage
    • Decreased lung capacity and increased respiratory effort
  o Abnormal changes
    • COPD
° Sensory alterations
  o Normal changes
    • Eyes
      ↑ Arcus senilis – grayish haze at outermost part of cornea
      ↑ Decreased tear production
      ↑ Presbyopia
      ↑ Astigmatism
      ↑ Night blindness
↑ Clouding of lens
  ↑ “Floaters”
- Ears
  ↑ Presbycusis
- Nose and mouth
  ↑ Altered smell or taste
  ○ Abnormal changes (see also Table 27-9)
    - Eyes
      ↑ Diplopia
      ↑ Cataracts
      ↑ Glaucoma
      ↑ Macular degeneration
      ↑ Diabetic retinopathy
      ↑ Retinal detachment
    - Ears
      ↑ Otosclerosis
      ↑ Tinnitus
      ↑ Meniere’s disease
- Renal system
  ○ Normal changes
    - Decreased number of working nephrons
    - Reduced filtering ability of kidneys
    - Ineffective bladder emptying
    - Nocturnal frequency
      ↑ Continence training [corresponds to Box 32-1]
      ↑ Bladder training [corresponds to Box 32-2]
  ○ Abnormal changes
    - UTIs
    - Chronic renal failure
  ○ Polypharmacy – condition that occurs when medications (including possibly herbal supplements) interact and create side effects
    - Elderly most susceptible due to decreased body system functioning
    ○ Manifestations:
      - Nausea or malaise
      - Confusion or irritability
      - Fainting
      - Jaundice
      - Sluggishness
      - Changes in elimination
  ○ Psychosocial changes and adaptations
    - Coping with loss (emotional and economic)
    - Financial changes (unemployed, retired)
    - Home care and independence
      - Assisted living facilities
    - Facing death
  ○ Priorities in nursing care:
- Meet physical and psychosocial needs.
- Observe normal and abnormal changes.
- Assist as needed with ADLs.
- Create a safe environment.
- Adapt personal care to needs of client.
- Give perineal care often with incontinence.
- Preserve client’s dignity.
- Check for skin dehydration.
- Ask about expected physical changes.
- Allow time for clients to think and respond.
- Show respect for client’s cultural or religious views. [corresponds to Box 32-3]
- Reorient confused client as needed.

Nursing Process Care Plan: Client With Chronic Obstructive Pulmonary Disease
Critical Thinking Care Map: Caring for a Client after Coronary Artery Stent Placement