**Head and Neck**

Hyperthyroidism
- Thyroid enlargement (goiter)
- Exophthalmos
- Tremors, Tachycardia
- Increased appetite, Weight loss
- Lid lag
- Amenorrhea
- Nervousness
- Heat intolerance

Hypothyroidism (Myxedema)
- Weakness, Fatigue
- Weight gain
- Non-pitting pseudoedema, Periorbital edema
- Decreased body temperature
- Dry skin
- Loss of outer portion of eyebrows
- Depression
- Heavy menstrual bleeding
- Bilaterally decreased Achilles DTR

Addison’s disease (adrenal insufficiency)
- Fatigue, Generalized muscle weakness
- Anorexia, Weight loss
- Hypotension
- Abdominal pain
- Skin hyperpigmentation

Cushing’s syndrome
- Central truncal obesity with thin limbs
- Buffalo hump
- Moon facies
- Capillary fragility, Purple abdominal striae
- Increased body hair (hypertrichosis)
- Chronic steroid use is the most common cause

Parkinson’s disease
- Resting tremor, diminishes with use (pill rolling of thumb and fingers)
- Shuffling festination gait
- Expressionless mask like facial appearance
- Decreased eye blinking
- Stooped flexion posture
- Cog wheel rigidity

Bell’s Palsy
- Unilateral facial paralysis of sudden onset (affects entire half of face, upper and lower)

Stroke
- Causes weakness and numbness of the face (Bells Palsy does not cause numbness)
- Bilateral innervation of upper muscles retains ability to wrinkle forehead & close eyes
- Paralysis of the arm and leg on the same side

Tension headache (muscle contraction headache)
- Most common cause of headache at any age, Affects both sexes equally
- Usually bilateral
- May be generalized or localized to the back of the head and upper neck
- May be described as a constrictive band around head
- Stressful life, anxiety, tension, and depression may be present
- May last for hours to days
- No pre-headache prodrome, No associated symptoms
Migraine headache
- Unilateral, may begin around the eye or temple
- Throbbing or pounding quality
- Often begins in childhood or early adolescence
- May be familial, more common in females
- Pre-headache aura
- Nausea, vomiting
- Transient vision loss which returns to normal, zig zag flashes of light at periphery of vision
- Hypersensitivity to light (photophobia), seeks dark room for relief

Cluster headache
- Tearing of eye, nasal congestion, and possibly ptosis and miosis
- Unilateral eye pain that may be described as sharp and stabbing, or ‘boring’
- Spring or Fall seasonal predilection
- Occurs in clusters for several months, then suddenly disappears
- More common in males (may be a smoker)
- No familial tendency
- No visual prodrome, or nausea and vomiting

Meningitis
- Headache
- Neck pain and stiffness
- Exposure to infectious organism, Fever
- Cervical flexion painful and restricted (Brudzinski’s sign)
- Extension of the leg from the 90-90 position is painful and restricted (Kernig’s sign)

Eyes

Dacrocystitis
- Tender red swelling beneath the medial canthus of the eye

Blepharitis
- Inflammation of the eyelids, usually caused by a staphylococcal infection
- Accumulation of greasy flakes or scales around the base of the eyelashes

Hordeolum (stye)
- Small red infection of a hair follicle at the eyelid margin

Chalazion
- Appears similar to a sty, however the swelling is not at the lid margin
- Contents of the cyst are sebaceous, rather than infectious

Ectropion and Entropion
- Ectropion = turning out of the lower eyelid
- Entropion = the eyelid is turned in

Ptosis
- Droopy upper eyelid that covers all or part of the pupil
- May occur with myasthenia gravis, Horner’s syndrome, or CN III damage

Xanthelasma
- Fatty, yellowish lesions on the upper or lower eyelids
- Most commonly seen with aging

Conjunctivitis
- ‘Pink eye’ - conjunctival redness around periphery of eyeball
- Eye pain and tearing of the eye

Trachoma
- Chronic conjunctivitis caused by Chlamydia infection
- 15% of blindness worldwide is caused by trachoma

Scleritis
- Severe boring eye pain
- Redness of sclera
- Hx of autoimmune inflammatory disorder
Iritis
  Eye pain with photophobia
  Red halo around the iris
  Decreased vision
  May be associated with autoimmune arthritides, such as ankylosing spondylitis
Pinguecula and Pterygium
  Yellowish thickening on nasal side of the bulbar conjunctiva
  Pterygium more serious when the growth grows across the cornea, may interfere with vision
Hyphema
  Blood in the anterior chamber of the eye
Hypopyon
  Pus in the anterior chamber of the eye
Subconjunctival hemorrhage
  Bright red area of localized hemorrhage beneath the conjunctival membranes
  Does not cause eye pain or interfere with vision
Herpes Zoster Ophthalmicus
  Shingles vesicles on the V1 branch of the trigeminal nerve
Keratoconjunctivitis Sicca
  ‘Dry eye syndrome’ often associated with Sjögren’s syndrome
Arcus senilis
  Grayish white deposit of lipoid material around the limbus of the iris
  ‘Normal variant’ of the elderly
Anisocoria
  Unequal pupil size
Miosis
  Pupils fixed and constricted (< 2 mm)
Mydriasis
  Pupils fixed and dilated (> 6 mm)
Oculomotor (CN III) damage
  Dilated pupil that fails to respond to light or accommodation
  Ptosis of the upper eyelid and lateral deviation of the eye may be present
Argyll Robertson pupil
  Small irregular shaped pupils (not PERRLA)
  React to near vision (accommodation), but fail to constrict to light
  Classically associated with untreated neurosyphilis
Adie’s tonic pupil
  Unilateral dilated pupil that reacts sluggishly to both light and accommodation
Horner's syndrome
  Ptosis, miosis, and anhidrosis of one eye
  May be caused by a Pancoast lung cancer
Cataract
  Clouding of the lens will cause gradual painless loss of vision
  Ophthalmoscopic exam reveals opacity
  Usually seen with the elderly, Juvenile diabetes is another cause
Papilledema (Choked disk)
  Bilateral swelling of the optic nerve heads due to increased intracranial pressure
Papillitis (Optic Neuritis)
  Unilateral inflammation of the optic nerve head
  May be caused by temporal arteritis or MS
Optic Atrophy
  Pale white disc due to death of optic nerve tissue
Primary open angle glaucoma
  Most common type of glaucoma, accounting for approximately 70-90% of all glaucoma
  Usually bilateral and symptoms develop gradually
Acute angle-closure glaucoma
Outflow of aqueous humor is blocked by a narrow angle where the iris meets the cornea
Acute onset of red eye around the iris
Unilateral eye pain
Large pupils, or pupil may be fixed between dilated and constricted
Headache, Dizziness, Decreased vision
Eyeball palpates hard and firm compared to normal eye

Hypertensive Retinopathy
'Copper wire' deformity (widened light reflex)
A-V nicking
Flame and splinter hemorrhages
'Cotton wool' soft exudates (local ischemic infarcts)

Diabetic Retinopathy
Microaneurysms
Dot & blot hemorrhages
Soft exudates
Hard exudates (lipid remains of vascular leakage)

Amaurosis fugax
Temporary painless loss of vision in one eye

Age-related macular degeneration
Loss of central vision, retention of peripheral vision
Affects elderly
Fundoscopic exam may reveal yellow spots (drusen) over the macula

Retinal detachment
Sudden onset of visual flashes of light or new ‘floaters’
Partial loss of vision in one eye as if a gray cloud appeared over a part of the visual field

Retinitis Pigmentosa
Hereditary disorder
Areas of dark pigmentation in a bone spicule pattern against the red retinal background
Vision is lost first at the periphery resulting in ‘tunnel vision’

Emmetropia
Normal vision, the cornea and lens focus light correctly on the retina

Myopia
Nearsighted, globe is elongated in the AP dimension resulting in light being focused anterior to the retina

Hyperopia
Farsighted, globe is flattened in the AP dimension resulting in light being focused posterior to the retina

Astigmatism
The cornea and lens are not symmetric (Light entering the eye focuses at several different points within the eye)

Drusen
Small yellow dots at the macula associated with macular degeneration

Myelinated nerve fibers
Fine feathery patches that may obscure the disc margin and retinal vessels
Normal variant - Usually unilateral and are present at birth

Ears, Nose, and Throat

Conductive hearing loss
Weber test - sound is heard louder in (laterlizes toward) the bad ear
Rinne negative - AC < BC or AC = BC
Causes: Impacted cerumen, Perforated TM, Otitis media, Otosclerosis

Sensorineural hearing loss
Weber test - sound is heard louder in (laterlizes toward) the good ear
Rinne positive - AC > BC
Causes: Congenital, Presbycusis, Occupational, Ototoxic drugs
Presbycusis
   High frequency sensorineural hearing loss that occurs as we age

Tophi
   Small, white yellow, non-tender nodules located at the helix or antihelix
   Contains uric acid caused by gout

External ear obstruction
   Unilateral loss of hearing
   Visual exam reveals cerumen in auditory canal
   Immediately improved upon removal of obstruction

Perforated tympanic membrane
   Ear pain
   Unilateral loss of hearing
   Otoscopic exam reveals perforation of TM (and blood if the perforation is recent)

Tympanosclerosis
   Dense white patches on TM from healed damage to drum

Otitis externa
   Infection and pain of the outer ear, usually caused by Pseudomonas or Staphylococcus
   Often associated with swimming, especially if the water is contaminated
   Tugging on the pinna will be painful
   Conduction hearing loss if canal is obstructed

Acute mastoiditis
   Pain upon pressure on the mastoid process
   Bacterial infection of the mastoid air cells
   May be fever and elevated WBC count

Acute otitis media
   Most common in children
   Bacterial infection of the middle ear, usually preceded by an upper respiratory infection
   Tympanic membrane is inflamed with an 'angry red' appearance
   Bulging TM with altered cone of light reflex
   Conduction hearing loss is usually unilateral

Secretory Otitis media with effusion
   May be seen in adults with a Hx of allergies
   Amber tympanic membrane with possible air fluid level visible behind TM
   Fluid is not infectious, usually non-febrile
   'Glue ear' - popping or crackling sound with swallowing or yawning
   Conduction hearing loss is usually unilateral

Cholesteatoma
   Malignant overgrowth of epidermal tissue through perforated TM
   White or yellow-gray cheesy infection with a purulent foul smelling discharge

Otosclerosis
   Ankylosis of the malleus, incus, or stapes
   Unilateral conduction hearing loss

Meniere’s disease
   Accumulation of endolymph fluid
   Causes vertigo, sensory hearing loss, tinnitus, and possibly nausea and vomiting
   Episodic attacks may last for minutes to hours

Herpes Zoster Oticus (Ramsay Hunt’s Syndrome)
   Shingles of the 8th CN ganglia

Epistaxis
   Nosebleed

Sinusitis
   Pain with pressure or percussion over maxillary and frontal sinuses
   Caused by allergies or an upper respiratory infection
   Transillumination may show fluid instead of air in the sinus

Angular Stomatitis
   Red sores at the corner of the mouth
   May be caused by B vitamin deficiency or poorly fitting dentures
Aphthous Stomatitis (Canker Sores)
   Small (< 1 cm), white circular lesion, with red border on tongue, gum, cheek, or lip
Pharyngitis
   Can lead to rheumatic fever and acute glomerulonephritis if caused by Group A beta-hemolytic streptococci (GABHS)
Peritonsillar Abscess
   Also known as Quinsy
Acute Nectrotizing Ulcerative Gingivitis (Trench Mouth)
   A noncontagious infection associated with a fusiform bacillus and spirochete
Gingival hyperplasia
   Can be seen as a side effect of long term use of anti-seizure medicine (Dilantin)
Lead line
   A thin black line at the gum margin, which is a sign of lead poisoning
Oral candidiasis (Thrush)
   Manifests thick white fungal patches are easily scraped off
Leukoplakia
   Similar in appearance to candidiasis, but leukoplakia patches do not easily scrape off
   The lesions are pre-cancerous and the patient should be referred for follow-up
Hairy Tongue
   The filiform tongue papillae are elongated and have a brown or black discoloration
   Thought to be related to poor oral hygiene
Atrophic Glossitis
   A smooth glossy appearance to the tongue suggests a deficiency of certain B vitamins
Fissured Tongue (Scrotal Tongue)
   Deep furrows on the tongue surface - a normal variant, or possibly due to dehydration
Geographic Tongue
   Discrete areas of increased redness that are visible where the papillae are missing
   The cause of this condition, also known as migratory glossitis, is unknown

Lungs and Respiratory
Viral upper respiratory infection (The common cold)
   Usually caused by either rhinovirus or coronavirus
   About 10-15% of colds are caused by flu viruses (longer lasting and more severe)
   Sneezing, watery eyes, sore throat, general malaise
   Cervical lymph nodes may be enlarged
   If a fever is present, it is low grade (with flu, a fever usually is present)
Acute Bronchitis
   Acute inflammation of the tracheobronchial tree
   Usually caused by a prior upper respiratory infection or cigarette smoking
   Causes a burning pain in the upper chest
   Hacking cough that is usually dry and nonproductive
Pneumonia
   Lower respiratory infection that frequently follows a cold or the flu
   Consolidation = accumulation of bacteria, blood cells, fluid, and cellular debris in the alveoli
   The patient will appear ill, and may manifest fever and chills
   Increased respiratory rate with labored breathing
   Possible cyanosis
   Possible blood tinged sputum
   Inspection: Asymmetric chest expansion
   Palpation: Increased tactile fremitus
   Percussion: Dull over fluid accumulation
   Auscultation: inspiratory rales, with bronchophony over areas having consolidation
   Chest x-ray: increased density from consolidation and an 'air bronchogram' sign
Tuberculosis
   Chronic, recurrent lung infection caused by Mycobacterium tuberculosis
   Individuals with a mild case of TB may remark that they are "not feeling well"
   As the condition progresses, a cough that "does not go away" may develop
   Eventually, the cough becomes productive of yellow or green phlegm
   May develop a fever and night sweats
   Auscultation: Rales in the upper posterior chest may be heard
   A chest x-ray is usually diagnostic

Pleurisy (Pleural effusion)
   Excess fluid collects in the intrapleural space
   Caused by conditions such as infection, lung cancer, congestive heart failure
   Pleuritic chest pain, described as a severe 'stabbing' sensation, worse with a deep breath
   Decreased tactile fremitus
   The area of effusion will percuss dull to flat
   Breath sounds are decreased to absent over the fluid accumulation
   A pleural friction rub while not frequent, is characteristic when heard
   A chest x-ray may show blunting of the costophrenic angles

Pneumothorax
   Free air between the visceral and parietal pleura
   Chest expansion is decreased on the affected side
   Tactile fremitus is decreased or absent
   When the air expansion is large the trachea will deviate away from involved side
   Over the areas of air expansion, the chest is hyperresonant to percussion
   Breath sounds are decreased or absent over the intrapleural air expansion
   A chest x-ray will show signs of radiolucency adjacent to areas of increased lung density
   Pneumothorax is a medical emergency, requiring immediate referral

Asthma
   Hypersensitivity reaction triggered by allergens such as dust, animal dander, or pollen
   Individual appears anxious and experiences wheezing, labored breathing, and 'air hunger' as
   a result of difficulty with exhalation
   Chest will feel 'tight' and the individual may cough
   High pitched expiratory wheeze as air exits past narrowed bronchial airways
   Possible intercostal retraction
   Possible cyanosis

COPD (Chronic obstructive pulmonary disease)
   Includes emphysema (COPD type A) and chronic bronchitis (COPD type B)
   Usually the result of a lifetime of cigarette smoking
   Emphysema - 'pink puffer'
   Dyspnea with prolonged expiration
   May assume the tripod position and unconsciously perform 'purse lip' breathing
   Individual may be thin, without cyanosis or edema
   Barrel shape chest, due to chronic over inflation of the lungs
   X-ray - increased radiolucency of the lung parenchyma, and a flat diaphragm
   Lung examination: decreased tactile fremitus, hyperresonant percussion, and decreased
   breath sounds on auscultation
   Chronic bronchitis - 'blue bloater' (cyanotic with digital clubbing of fingernails, pitting
   edema of legs)

Bronchiectasis
   Chronic cough with purulent and foul smelling sputum
   Hypoxia may result in clubbing of the fingernails
   Bronchiectasis is common in children with cystic fibrosis

Atelectasis
   Collapsed lung usually the result of bronchial obstruction by a mucous plug
   When the collapse is large, symptoms of tachypnea, dyspnea, and chest pain manifest
   Cyanosis and a fever may be present
Pulmonary embolism
Blood clot in a pulmonary artery causing obstruction of blood supply to lung parenchyma
Recent surgery, fracture, and immobilization may cause a pre-embolic condition
With a large lung embolism, the pain may be severe and 'knife-like', with hemoptysis
Pulmonary embolism does not show up on plain chest x-ray

Lung cancer
Leading cause of cancer death in the US for both men and women
90% of lung cancer is the direct result of cigarette smoking
Hacking 'smoker's cough', chest pain, dyspnea, hemoptysis, and weight loss
With severe hypoxia, digital clubbing of the fingernails may be seen
A superior sulcus (Pancoast) tumor may manifest symptoms of Horner's syndrome
Supraclavicular lymph nodes may be enlarged

Costochondritis
Pain at the 2nd to 5th costosternal articulations
Pain increased with a deep breath (cardiac pain is not made worse with deep breathing)

Herpes zoster
Pain and a band of vesicles in the dermatomal nerve band between two ribs
Hypersensitivity pain
Allodynia - pain from a normally nonpainful stimulus, such as the shirt rubbing the skin

Cardiovascular

Angina pectoris
Brief episode of substernal chest pressure or discomfort, usually brought on by exercise
Unstable angina - the attacks may become more frequent, severe, and longer lasting, or occur while at rest

Myocardial infarction
Crushing substernal chest pain, which may radiate to the neck or either shoulder
Levin’s sign - Clenched fist held against the chest when describing the pain
May be pale or sweating, and experiencing nausea and shortness of breath
Pulse may be weak and thready
Blood pressure is high if there is also hypertension, or low if approaching heart failure
ECG may show an inverted T wave, ST elevation, and a deep Q wave
Cardiac enzymes are elevated (Sequence: Troponin & CPK; AST; LDH)

Congestive heart failure
May appear pale, with gray or cyanotic skin
May be weak and fatigued and appear anxious due to their 'air hunger'
Uncomfortable laying flat and need to sleep propped up in bed (orthopnea)
Lung congestion may awaken at night with paroxysmal nocturnal dyspnea (PND)
Frothy pink productive cough
Swollen abdomen due to ascitic fluid accumulation
Jugular venous distention (JVD) may be visible
Ankles usually show dependent, pitting edema
Increased heart rate with a possible S3 gallop
Crackles and wheezing will be heard on lung auscultation
Liver and spleen may be palpably enlarged from venous congestion

Hypertrophic Cardiomyopathy
Congenital condition where the heart myocardium thickens inwardly
Early warning symptoms include shortness of breath, angina, and dizziness or fainting

Mitral Valve Prolapse
Most common heart valve defect which causes a mid-systolic click and possibly a mitral regurgitation murmur

Pericarditis
Inflammation of the pericardial sac from infection or heart attack (Dressler’s syndrome)
Fluid accumulation may cause pericardial tamponade, a life threatening condition
Pressure may cause pulsus paradoxus - decreased blood pressure during inspiration
Pain is worse with motion and laying down, and better with sitting up and leaning forward
A pericardial friction rub is heard about 60-70% of the time
Aortic dissection
A tear within the blood vessel which causes atrocious chest pain as if being 'torn in half'
Intensity of the pain is maximal at the initial onset
Hypertension is probable, and about two thirds of patients have peripheral pulse deficits
With abdominal aneurysm, may be an abdominal bruit and a pulsating abdominal mass

Breast
Paget's Intraductal Carcinoma
Dry, red, scaling of tissue surrounding the nipple; may appear similar to eczema
Unlike eczema, intraductal carcinoma is usually unilateral

Fibroadenoma
Fibroadenoma is the most common benign tumor of the breast
Usually occurs during the early years of menstruation
Palpates as a unilateral nontender "small slippery marble"

Fibrocystic breast disease
Also known as benign breast disease
Bilateral breast swelling and tenderness prior to menstrual flow
Most common in 30-50 year age range

Breast cancer
Most common after age 50
May cause dimpling or nipple retraction as the cancer grows into Cooper's ligaments
'Orange peel' texture is due to blocked lymphatic drainage

Abdomen and Gastrointestinal
Gastroesophageal reflux (GERD)
Retrosternal heartburn, a bitter or sour taste in the mouth from reflux of stomach contents
May experience dysphagia and laryngitis if the acid reflux is more than minimal
Eating too large a meal or lying down after meals may trigger esophageal reflux
May cause a night time cough while recumbent

Gastritis
Causes dyspepsia, epigastric pain, nausea, and upper abdominal bloating
Constant epigastric pain

Peptic ulcer disease
Includes duodenal ulcers (most common) and gastric ulcers
Causes 'burning' or 'gnawing' epigastric pain
Pain worse with meals suggests gastric ulcer
Duodenal ulcer pain initially relieved with eating, recurs two to three hours after the meal
Vomiting after eating gives temporary relief of epigastric pain
May have coffee grounds emesis
H. pylori ulcers most common on lesser curvature
NSAID ulcers most common on greater curvature

Mechanical bowel obstruction
Predominant symptom is severe abdominal pain, similar to baby 'colic'
Obstipation (total lack of bowel movements) results with complete bowel obstruction
Initially loud borborygmi, caused by hyperactive bowel motility
In later stages of complete obstruction, decreased or absent bowel sounds
KUB x-ray will disclose marked gaseous distention proximal to the obstruction

Adynamic ileus
A temporary arrest of intestinal peristalsis, possibly from a peritoneal infection
In contrast to complete mechanical obstruction, the ability to pass gas is retained
Appendicitis
- Manifests initially as dull periumbilical pain
- As infection progresses, the pain becomes sharp and localizes in the RLQ
- Fever, nausea, vomiting, and anorexia are common
- Abdominal pain precedes nausea and vomiting
- With peritonitis the abdomen may have involuntary rigidity
- Rebound tenderness is likely at McBurney’s point
- Rovsing’s sign: Rebound at the LLQ recreates the RLQ pain
- WBC values are typically elevated above 10,000, with a shift to the left

Pancreatitis
- Most commonly caused by chronic alcohol abuse
- Severe upper abdominal pain that may radiate to the chest, back, or left shoulder
- Fever, nausea, vomiting
- Cullen’s sign: periiumbilical ecchymosis
- Grey Turner's sign: flank ecchymosis
- Ecchymosis skin discolorations caused by an accumulation of blood within the fascial planes
- Serum amylase and lipase are elevated
- Possible diabetes mellitus (pancreatic endocrine function)

Gastroenteritis
- Inflammation of the lining of the stomach and intestines
- Gastroenteritis ('stomach flu'), is often caused by food poisoning (salmonella, E coli, etc.)
- Also caused by viruses, such as adenovirus or the Norwalk virus
- Anorexia, nausea, vomiting, diarrhea, and abdominal pain
- Nausea and vomiting precedes abdominal pain
- Fever suggests a more significant bacterial infection
- Inspection: visible peristalsis may be seen
- Auscultation: hyperactive bowel sounds

Malabsorption syndrome
- Caused by a defect of digestion and absorption of food in the small intestine
- Celiac sprue: a gluten allergy that causes inflammation of the small intestine
- Tropical sprue: thought to be caused by a viral, bacterial, or parasitic infection
- Gas, bloating, crampy lower abdominal pain, and diarrhea
- With malnutrition, there may be weight loss and anemia
- Pale, foul smelling stool from fat that is not digested and absorbed

Crohn’s Disease
- Patchy inflammation creates 'cobblestone' full thickness lesions
- While it may occur in any part of the gastrointestinal tract, usually in the terminal ileum
- Abdominal pain and chronic, nonbloody diarrhea
- Associated symptoms: iritis, photophobia, symmetric arthritis, and perianal lesions

Ulcerative Colitis
- Continuous surface inflammation of the large intestine
- Abdominal pain and frequent diarrhea as with Crohn's disease
- However, with ulcerative colitis the diarrhea is usually bloody
- May be associated rectal conditions such as fissures, abscess, or hemorrhoids
- Pain may temporarily be decreased with a BM

Irritable bowel syndrome
- Also known as spastic colitis, causes crampy lower abdominal pain
- Diarrhea that alternates with periods of constipation
- Affects females more than males, most common in the late teens and early 20's
- Usually triggered by stressful life situations, such as taking exams
- Abdominal pain may be relieved with defecation
- Stool is not bloody but may reveal the presence of mucous

Diverticulitis
- Very common condition after age 60
- Severe LLQ abdominal pain, nausea, vomiting, fever
- May be involuntary muscular rigidity and a very painful palpable LLQ mass
Hepatitis
Inflammation of the liver, caused by a virus, toxins, or chronic alcohol abuse
Symptoms similar to flu: nausea, vomiting, fever, loss of appetite, abdominal pain
Liver palpates tender and enlarged, but the edge remains soft and smooth
Jaundice of the skin, mucous membranes and sclera

Cirrhosis
Usually caused by chronic alcohol abuse causing liver parenchymal cell damage
Anorexia, malaise, weight loss, abdominal discomfort, and generalized weakness
Cirrhotic liver palpates enlarged, and palpates with a smooth, firm, blunt edge
Decreased albumin production may lead to swelling in the legs and abdomen (ascites)
Jaundice develops as bile products are not processed by the liver
Portal hypertension may cause enlargement of abdominal blood vessels (caput medusa)

Liver cancer
Previous hepatitis or cirrhosis is a risk factor for primary liver cancer
In the US, metastatic liver cancer is 20 times more common than primary liver cancer
Vague and nonspecific symptoms, such as fatigue, malaise, unexplained fever
As condition progresses, weight loss and abdominal pain
Cancerous liver palpates as enlarged, with a hard irregular border
Possible palpable supraclavicular lymph nodes

Cholecystitis
Cholecystitis is most common cause of acute abdominal pain in patients over 50
Severe RUQ pain, nausea, vomiting, and fever
Pain may radiate to the tip of the right scapula
May be precipitated by eating a large, fatty meal several hours earlier
Positive Murphy's inspiratory arrest sign
Chronic condition: may have had previous episodes, with periods of relief

Colorectal carcinoma
Third leading cause of cancer in either sex; 90% occurs after age 50
Abdominal pain, change in bowel habits, blood in stool, anemia, weight loss
A stool guaiac test which shows occult blood is a screen for this cancer

Genitourinary

Urinary tract infection
Female:Male = 50:1 incidence
Dysuria, frequency, urgency, nocturia, and low back pain
 Burning with passage of urine
 Male may notice a discolored discharge on the underwear
 Yellow discharge - gonorrhea infection; Nongonococcal infection - clear to white discharge
 Abdominal palpation may disclose suprapubic tenderness
 Possible new sexual contact

Urinary calculi
Many stones are 'silent', passing without complication
May have a history of previous stone formation
A large stone lodged in the ureter causes extreme pain
Costovertebral flank pain usually radiates to the groin region
No relief of pain with change of position
Nausea, vomiting, chills, and fever occur
Urinalysis: hematuria, bacteriuria if infection is present

Nephritic Syndrome (Acute Glomerulonephritis)
More common in children than adults
Usually develops after a recent streptococcal infection
May experience headaches (from hypertension)
Costovertebral angle tenderness
Face swells (peri orbital edema)
Proteinuria and hematuria, RBC casts in urine
Possible elevated Antistreptolysin O titer
Possible azotemia (increased serum creatinine and BUN)
Chronic Nephritic-Proteinuric Syndrome (Chronic Glomerulonephritis)
Condition of adults, usually unrelated to previous acute glomerulonephritis episodes
Most common causes: atherosclerosis, diabetes, and hypertension
May be asymptomatic, discovered when proteinuria or hematuria, is found on routine UA
When the condition progresses to kidney failure: anorexia, fatigue, anemia, hypertension
CBC may show anemia; chem screen will show azotemia (increased BUN and creatinine)
Fine granular and waxy casts in urine sediment

Nephrotic Syndrome
Minimal change disease, the most common cause, occurs primarily in children
Diabetes is the most common cause for nephrotic syndrome in adults
Kidney damage results in markedly increased protein loss in the urine (> 3.5 G / 24 hours)
Protein loss causes hypoalbuminemia, generalized edema, often 'mobile' edema
Serum albumin decreased, and uremia (increased serum BUN and creatinine)
Fluid accumulation in the lungs may cause shortness of breath, with crackles on auscultation

Acute renal failure
Three main causes:
- Prerenal azotemia may occur with disorders having decreased renal perfusion,
  such as uncontrolled diarrhea or hemorrhage
- Intrinsic renal damage may result from drugs or other nephrotoxins,
  such as streptococcal infection
- Postrenal azotemia is seen with conditions that block urine outflow,
  such as ureteral or bladder obstruction
The patient may manifest oliguria and steadily decreasing renal function (azotemia)

Chronic renal failure
Predominantly a condition of adults
Caused by diabetes, hypertension, polycystic kidney disease, or nephrotoxic drugs
Uremia may produce pruritus, dry skin, and a metallic taste in the mouth
Compromised erythropoietin production may cause pallor, anemia, fatigue
Increased serum BUN, creatinine, triglycerides, potassium, phosphorus, uric acid

Polycystic kidney disease
Inherited condition - cysts cause greatly enlarged palpable kidneys
Cysts cause decreased renal function and hypertension
May also have cysts on liver or associated cerebral aneurysm
No treatment other than dialysis and kidney transplantation

Benign prostatic hyperplasia
Very common in males over fifty
Frequency, urgency, sense of incomplete emptying of the bladder
Nocturia and back pain may manifest
Nontender, smooth, symmetrical enlargement with a rubbery consistency; median sulcus may be less palpable

Prostatitis
May have signs of infection (fever, chills, malaise)
Urethral discharge, dysuria
Dull pain in the perineal area, or low back pain
May have testicular pain and painful ejaculation
Prostate very tender upon palpation, slightly enlarged, with a 'boggy' consistency

Prostate cancer
Second leading cause of cancer in men; Rare before age 50
Frequency, urgency, dysuria, and low back pain
A hard nodule may be palpable on the prostate; lateral margins may be asymmetric; median sulcus less palpable

Priapism
Prolonged, painful erection not associated with sexual stimulation

Phimosis
Foreskin is constricted and will not easily retract

Paraphimosis
Tightened foreskin retracts but will not return to the extended position
Hypospadias
  Birth defect - Urethral meatus is displaced ventrally toward the scrotum
Epispadias
  Birth defect - Urethral meatus is displaced dorsally toward the umbilicus
Cryptorchidism
  Undescended testicle
Klinefelter's syndrome
  XXY chromosomal anomaly that causes a feminized appearance in the male
  Hypogonadism, poor beard growth, breast development, and small testicles
Testicular Cancer
  Rare overall (1% of all male cancer), but most common form of cancer in males age 20-34
  Painless nodule on or within the testicle
  Cancerous testicle will be larger (and may feel heavy) on that side
Indirect Inguinal Hernia
  Most common type of hernia, comprising 60% of all hernias
  The hernia passes down the inguinal canal exiting at the external inguinal ring
  Upon examination, the hernia presses the tip of the palpating finger
Direct Inguinal Hernia
  Second most common type of hernia
  The hernia does not pass through the inguinal canal, but exits 'directly' through the external inguinal ring
  The hernia presses palpating finger anteriorly when patient coughs or bears down
Femoral Hernia
  Femoral hernia is in the groin, but is not an inguinal hernia
  Least common groin hernia, and occurs primarily in obese women after several pregnancies
  Presents as a bulge at the site of the femoral pulse

Gynecological

Premenstrual Syndrome
  Very common, affecting 20-90% of all women during their child bearing years
  Nervousness, irritability, emotional instability, anxiety, depression, and possibly headaches, edema, and mastalgia
  Occurs during the 7 to 10 days before the onset of menses
Primary Dysmenorrhea (functional dysmenorrhea)
  Crampy lower abdominal pain that starts 12-24 hours prior to the onset of menses
Secondary Dysmenorrhea (acquired dysmenorrhea)
  Caused by organic pathology, such as endometriosis, uterine fibroids, or PID
Amenorrhea
  Primary - Menarche delayed beyond about 16 years of age
  Secondary - Cessation of periods in woman who was previously menstruating (pregnancy most common cause)
Turner's syndrome
  Genetic anomaly (missing X chromosome) causing a masculinized appearance in a female
  Underdeveloped gonadal structures, amenorrhea, poor breast development
  Short stature and webbing of the neck
Polycystic ovarian syndrome
  Ovaries enlarges with multiple cysts
  Irregular periods or amenorrhea
  Infertility, obesity, hirsutism
Menopause
  Typically occurs age 45-55; less than age 40 is considered premature
  Hot flashes, night sweats
  Vaginal dryness leading to painful intercourse
  Nocturia and urge incontinence
  Anxiety, nervousness, irritability
  Speculum examination: pale, dry vaginal mucosa with abraded areas that bleed easily
  Confirmed with elevated FSH lab test
Endometriosis  
Viable functioning endometrial tissue present outside the uterus  
Heavy menstrual bleeding (menorrhagia), perimenstrual pain, and painful intercourse (dyspareunia)  
Possible infertility  

Uterine fibroids  
Benign firm lumpy tumor within the uterine wall  
Most common pelvic tumor in women; more common in African American women  
Most common symptom is heavy, possibly continuous menstrual bleeding  

Endometrial Cancer  
Most common pelvic cancer, more common than cervical carcinoma  
Abnormal uterine bleeding  

Ovarian Cancer  
Second most common gynecologic cancer  
Fourth highest cause of cancer death in American women  
Early ovarian cancer may be asymptomatic, or present with non-specific symptoms such as:  
back pain, fatigue, indigestion, constipation, abdominal pain  
Often fatal because it is detected late  

Cervical Cancer  
Third most common gynecologic cancer in women  
Intermenstrual bleeding or bleeding after intercourse  
May be picked up as a result of a routine PAP smear  

Ovarian Cyst  
Menstrual irregularities, pelvic pain  
 Possibly symptoms similar to pregnancy, i.e. morning sickness and breast tenderness  

Vulvovaginal infection  
Vaginal discharge is the most common symptom cited by women seeking health care  
Candidiasis - thick 'cottage cheese' like discharge  
Gardnerella - gray white discharge, 'constant wetness', with a musty or fishy odor  
Trichomoniasis - frothy, yellow green, foul smelling discharge, 'strawberry' flea-bitten cervix  

Pelvic Inflammatory Disease (PID)  
Most common among sexually active teenagers  
Purulent malodorous vaginal discharge  
CDC diagnosis guidelines require all of the following:  
• Lower abdominal tenderness  
• Adnexal tenderness  
• Cervical motion tenderness (Chandelier's sign)  
• Absence of a competing diagnosis (such as appendicitis)  
May also have fever & elevated WBC count, but these may not be present with mild infection  

Ectopic Pregnancy  
Approximately 1% of all pregnancies are ectopic  
At least one half of these women have a history of previous PID infection  
Initially signs of normal pregnancy: amenorrhea, morning sickness, breast tenderness  
After about six weeks, the increased embryo size will begin to cause severe abdominal pain, and possibly vaginal bleeding  
If rupture and hemorrhage occurs, the woman may manifest signs of shock: decreased BP, clammy skin, pallor, tachycardia  
It is impossible for an ectopic pregnancy to come to term; the pregnancy will be terminated by either surgery or miscarriage  

Cystocele ('dropped bladder')  
Protrusion of the bladder through the anterior wall of the vagina  

Rectocele  
Part of the rectum protrudes through the posterior wall of the vagina
Pregnancy
- Missed period
- Morning sickness (nausea, vomiting) of 1-4 months duration
- Weight gain
- Breast tenderness and engorgement
- Areola enlarges and becomes darker
- Montgomery's tubercles become more prominent
- Blue network of mammary veins become more visible

**Vascular and Lymphatic**

Hodgkin's disease
- May present as a lump or swelling in their neck, groin, or axilla
- May be discovered when lung hilar lymph nodes are more visible on a routine chest x-ray
- Fever, night sweats, weight loss, fatigue and severe itching
- Enlarged lymph nodes may palpate as rubbery or matted
- Possible splenomegaly
- Anemia and lymphocytopenia may manifest
- Definitive diagnosis requires the presence of Reed-Sternberg cells (unusually large multinucleated white blood cells) in a lymph node biopsy

Infectious mononucleosis
- Most often seen in adolescents
- Sometimes referred to as the 'kissing disease' because the virus can be spread via saliva
- Symptoms are similar to flu: fever, sore throat, headache, fatigue, malaise
- Often causes cervical lymphadenopathy
- Possible splenomegaly
- Confirmed via the Monospot test (the Paul-Bunnell test was an early version of this test)
- A blood smear will disclose large atypical lymphocytes (Downey cells)

Human Immunodeficiency Virus (HIV) Infection
- 'Red flag' symptoms that should alert you to the possibility of AIDS:
  - long term fatigue for no apparent cause
  - lymph nodes swollen for over six months
  - fever that lasts for more than ten days
  - night sweats
  - unexplained weight loss
  - severe persistent diarrhea
  - purplish or discolored lesions on the skin or mucous membranes that do not heal
- ELISA lab test has false positives, so must be confirmed with Western Blot test
- CD4 count is used to monitor the progression of the disorder

Peripheral Arterial Occlusion
- Intermittent claudication - cramping muscle pain in the legs while walking, relieved with rest
- Decreased or absent pulses; Pale, cool skin with a possible absence of leg hair
- Sudden throbbing pain if a thrombus breaks loose and becomes lodged
- Leriche's syndrome: 'saddle thrombus' blockage at the bifurcation of the aorta
- Buerger's test may show 'elevation pallor, dependent rubor'
- Arterial insufficiency skin ulcers have well defined edges with no bleeding

Thromboangitis Obliterans (Buerger's Disease)
- A specialized form of peripheral arterial occlusion
- Occurs primarily in men, age 20-40, who are smokers

Raynaud's Syndrome
- Vasospasm of the small arterioles of the fingers resulting in impaired blood flow, primarily in young women
- Initially the fingers turn white from the lack of blood, then blue as the blood gradually returns, then red when the blood vessels undergo full dilation
Acrocyanosis
Similar to Raynaud’s in that it causes a bluish discoloration of the hands
Differs from Raynaud’s in that the fingers do not show white or red skin discoloration

Erythromelalgia
Arterial vasodilation that causes swelling, redness, and a burning pain in the feet

Superficial thrombophlebitis
Usually occurs in conjunction with varicose veins
Leg pain that may be burning or throbbing
A tender cord may be palpable and visible beneath the surface of the skin

Deep vein thrombosis (DVT)
Less common than superficial thrombophlebitis, but more serious due to larger clots
Most common location for DVT is the calf
Leg may be swollen and edematous, red, and hot to touch
Homans’ foot dorsiflex test may be positive, although this test is often false positive

Venous Insufficiency
Risk factors include pregnancy, obesity, and occupations that involve prolonged standing
Decreased flow of blood back to the heart leads to pitting edema
Skin becomes thick and ‘brawny’ due to accumulation of waste products
In contrast to arterial insufficiency, pulses are normal
Venous insufficiency ulcers have bleeding uneven edges
Superficial varicosities present as bluish, ropelike cords beneath the skin

Lymphedema
Painless accumulation of excessive lymph fluid and swelling of subcutaneous tissues
Lymphedema produces non-pitting edema (vs. pitting edema seen with CHF
Lymphedema skin may become thickened and harder than usual

Lymphangitis
May develop as a consequence of a wound such as an animal bite
Manifests as a painful red streak moving centrally from the site of infection
The infective organism is typically a strep or staph infection
Systemic symptoms such as fever, chills, headache, and myalgia may manifest