Diagnostic Checklists

1. The goal of these checklists is to prompt physicians to consider a broad differential diagnosis for diagnostically challenging patients in primary care and to help resist the most common cause of missing a diagnosis: the physician's failure to consider it. The lists are not exhaustive, but the goal is feasible because

   a. It is possible to cover 99% of diagnostically challenging complaints with a short list, whereas 100% coverage would require a long list.

   b. Similarly, for each complaint it is possible to cover 99% of the diseases that cause it with a short list.

   c. There are no checklists for complaints that rarely pose diagnostic challenges, either because the list of causes is short (e.g., constipation, rectal bleeding, breast lump, sore throat, nasal congestion), the diagnosis is obvious (e.g., minor trauma, wart), or there is a single cause that accounts for the overwhelming majority of cases (e.g., hypertension, obesity).

   d. The checklists do not include diagnoses that are exceedingly rare in North America, diagnoses that are obvious (e.g., major chest trauma as a cause of chest pain), or diagnoses where the symptom is a late manifestation rather than a presenting complaint (e.g., abnormal uterine bleeding caused by end-stage renal disease).

2. The diagnoses are listed in approximate order of decreasing prevalence (most common diseases at the top).
This ordering is based on limited published data and the authors' experience. (Cherry DK, Hing E, Woodwell DA, Rechsteiner EA. National Ambulatory Medical Care Survey: 2006 Summary. National Health Statistics Reports. Number 3. August 6, 2008.)

3. Unless otherwise specified, the checklists address complaints by adults rather than children.

4. These checklists may have four advantages over more traditional differential diagnoses:
   a. A shorter list, practical at the point of care
   b. An indication of disease prevalence in primary care
   c. Identification of "must-not-miss" diagnoses, designated by an ace of spades (♠)

5. The checklists are designed to be printed on 4x6 cards, two-sided, with a 3/4 inch metal binder ring. The lists could also be adapted for a handheld computer.
Abdominal and pelvic pain (6/29/10)

Peptic gastritis, esophagitis
Viral gastroenteritis
Constipation
*Psychiatric (depression, sexual abuse)
Irritable bowel syndrome
*Diverticulitis
*Pancreatitis
*Gallbladder disease
*Bowel obstruction, partial small bowel obstruction
*Pregnancy complication, ectopic pregnancy
Mesenteric adenitis
*Appendicitis
*Myocardial infarction
*Kidney stone
*Pelvic inflammatory disease
*Ovarian cyst, ovarian torsion, endometritis
Endometriosis
Abdominal wall pain (trigger point pain)
Herpes zoster
Celiac disease
*Hepatitis, hepatic abscess
*Pneumonia, empyema
Mittleschmerz
*Intraabdominal tumor
Giardia
*Diabetic ketoacidosis
*Aortic dissection, ruptured aneurysm
*Mesenteric ischemia, infarction
*Hernia
*Perforated viscus, peritonitis
Food poisoning

Copyright © by the Association of American Medical Colleges. Unauthorized reproduction is prohibited.
Inflammatory bowel disease
*Sickle cell crisis
*Lead poisoning
*Leukemia
*Meckel's diverticulitis
Abnormal uterine bleeding (1/20/10)
Anovulatory bleeding, polycystic ovary syndrome
Menorrhagia
Contraceptive related abnormal bleeding (oral, depo-medroxyprogesterone, intrauterine device, progestin implant)
♠Ectopic pregnancy
♠Intrauterine pregnancy complication
♠Endometrial cancer, hyperplasia
Polyps
Fibroids
♠Endometritis
Hyperprolactinemia
Thyroid disease
Drugs (anticoagulants, psychotropics)
Normal variation (postmenarchal, perimenopausal, premenstrual spotting, postmenstrual spotting, midcycle ovulatory bleeding)
Coagulopathy (von Willebrand)
Organ failure (late manifestation: kidney failure, liver failure)
Anxiety, depression (7/15/10)
- Depression, agitated depression, bipolar disorder
- Anxiety (situational, generalized anxiety disorder)
- Panic disorder
- Alcohol
- Hypoglycemia
- Medications
- Thyroid disorder
- Paraneoplastic syndrome
- Pulmonary embolus
- Hypoxemia
- Pheochromocytoma
Back pain
Musculoskeletal, nonspecific
Herniated disk
Spinal stenosis
♠Gall bladder disease
Compression fracture
♠Pyelonephritis, kidney stone
♠Pancreatitis, pancreatic carcinoma
♠*Pulmonary embolus
♠*Pneumonia
Psychiatric
Herpes zoster
Vitamin D deficiency
♠Polymyalgia rheumatica
Prostatitis
♠*Abdominal or thoracic aortic aneurysm
♠Metastatic tumor
♠Abdominal tumor
♠Penetrating ulcer
♠Infection (diskitis, osteomyelitis, spinal abscess)
<table>
<thead>
<tr>
<th>Chest pain</th>
<th>(6/17/10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest wall pain</td>
<td></td>
</tr>
<tr>
<td>GERD</td>
<td></td>
</tr>
<tr>
<td>Pleurisy, pleuritis</td>
<td></td>
</tr>
<tr>
<td>*Psychiatric</td>
<td></td>
</tr>
<tr>
<td>♠*Coronary disease (myocardial infarction, angina)</td>
<td></td>
</tr>
<tr>
<td>♠*Pulmonary embolus</td>
<td></td>
</tr>
<tr>
<td>Herpes zoster</td>
<td></td>
</tr>
<tr>
<td>♦*Pneumonia, bronchitis</td>
<td></td>
</tr>
<tr>
<td>♠Pneumothorax</td>
<td></td>
</tr>
<tr>
<td>Esophageal spasm</td>
<td></td>
</tr>
<tr>
<td>Pericarditis, myocarditis</td>
<td></td>
</tr>
<tr>
<td>♦Aortic stenosis</td>
<td></td>
</tr>
<tr>
<td>♠*Dissecting aortic aneurysm</td>
<td></td>
</tr>
<tr>
<td>♠*Tumor</td>
<td></td>
</tr>
<tr>
<td>♠Esophageal rupture</td>
<td></td>
</tr>
<tr>
<td>♦*Spinal cord compression</td>
<td></td>
</tr>
</tbody>
</table>
**Cough**

Viral upper respiratory infection
Postnasal drip
Postinfectious, postviral cough
Bronchitis
Asthma, chronic obstructive pulmonary disease
Gastroesophageal reflux
*Drugs (angiotensin converting enzyme inhibitors, beta blockers, amiodarone)
*Pneumonia
External or middle ear disease
Aspiration, recurrent
*Pulmonary embolus
*Pertussis
Psychogenic
*Heart failure
*Tumor
*Epiglottitis
*Acute histoplasmosis
Interstitial lung disease
Bronchiectasis
*Sarcoidosis
*Tuberculosis
*Cystic fibrosis
*Laryngeal tumor
*Mitral stenosis
*Foreign body
Cough, dyspnea (infant, newborn) (2/16/10)
Viral upper respiratory infection
Respiratory syncytial virus (RSV)
Transient tachypnea
♠Sepsis
Infant respiratory distress syndrome
Metapneumovirus
♠Pneumothorax
♠Pneumonia
Asthma
♠Heart disease
Crying infant (Inconsolable) (6/1/10)

Idiopathic
Colic
♠ Infections (otitis media, viral illness, urinary tract infection, herpes stomatitis)
♠ Fracture
Corneal abrasion
Constipation
Immunization reaction
♠ Hair tourniquet syndrome
Delirium

*Drugs
*Psychiatric disorders
Alcohol
*Anemia
*Glucose disturbances
Serotonin syndrome
Trauma
Head injury
*Myocardial infarction
Carbon monoxide
Sepsis
Electrolyte disturbance, Na, Ca, Mg, P
Thyroid disease
Hypoxia
Hypertensive encephalopathy
CNS infections
Brain mass
Hypothermia
Hyperthermia
B12 deficiency
Folate deficiency
Thiamine deficiency
Liver failure
*Heart failure
Renal failure
Burns
Postpartum psychosis
Adrenal disease
Porphyria
Nonconvulsive status epilepticus
Dementia, memory loss

Alzheimer disease
♠ Pseudodementia (depression)
Mild cognitive impairment
♠ Medications (antihistamines)
Alcohol
Vascular dementia
Dementia with Lewy bodies
Parkinson disease
♠ Vitamin B12 deficiency
♠ Hypothyroidism
♠ Delirium
♠ Anoxia
♠ Hypoglycemia
♠ Head injury
Transient global amnesia
Progressive supranuclear palsy
♠ Structural brain disease
Diarrhea

Viral gastroenteritis
Irritable bowel syndrome
Salmonella
Shigella
E. coli O157 H7
Campylobacter
Clostridium difficile
Food poisoning
Lactose intolerance
Bacterial overgrowth
Diabetes
Drugs, laxatives
Lactase deficiency
Giardia
Microscopic colitis
Entamoeba histolytica
Cryptosporidium
Inflammatory bowel disease
Celiac disease
Yersinia
Bypass operations
Pancreatic insufficiency
Blastocystis hominis
Laxative abuse

(2/24/10)
Dysphagia

Esophageal spasm
Lower esophageal ring
Peptic stricture
Functional dysphagia
Nutcracker esophagus
Achalasia
♠ Stroke
♠ Tumor (intrinsic or extrinsic)
Multiple sclerosis
Amyotrophic lateral sclerosis
Scleroderma
Myasthenia gravis

(6/1/10)
**Dyspnea, tachypnea** (2/11/10)

Asthma, chronic obstructive pulmonary disease
Fever
Deconditioning
♠*Pneumonia
Physiologic dyspnea of pregnancy
Bronchitis
♠*Heart failure
♠*Pulmonary embolus
♠*Myocardial infarction
*Psychiatric, hyperventilation
♠Pneumothorax
♠Cardiomyopathy
♠Shock
♠*Anemia
♠*Tumor
♠Pleural effusion
♠Valvular heart disease
♠Pulmonary hypertension
Interstitial fibrosis
♠Metabolic acidosis
Drugs (ASA)
Arrhythmias, atrial fibrillation
Abdominal distension, obesity
♠Cardiac tamponade
♠Upper airway obstruction
Myasthenia gravis
♠Hyperthyroidism
♠Foreign body aspiration
♠Increased intracranial pressure
Ear pain, otalgia (6/23/10)
Acute otitis media, otitis media with effusion
TMJ syndrome
External otitis
Cerumen
Viral myringitis
Dental causes
Pharyngitis
Barotrauma
Foreign body
Idiopathic
Cervical adenopathy
Cellulitis, chondritis, perichondritis
Acoustic neuroma
*Myocardial infarction
Nasopharyngeal tumor
Temporal arteritis
Cholesteotoma
Sinusitis
Carotidynia
Trauma
Mastoiditis
Gastroesophageal reflux
Tumors (ear, nasopharyngeal)
Bell's palsy
Wegener's granulomatosis
Cervical disc disease
Ramsey Hunt syndrome
Relapsing polychondritis
Malignant external otitis
Coronary disease
Thoracic aneurysm
♣*Psychogenic (depression, anxiety)
♣Thyroid tumor
Salivary gland disorder
Neuralgias (trigeminal, glossopharyngeal)
Eagle's syndrome
Edema, leg

Venous insufficiency, dependency, garments
Obstructive sleep apnea (resulting in pulmonary hypertension)
*Drugs (NSAIDS, Ca channel blockers, steroids)
♠Deep vein thrombosis
♠*Heart failure
Baker's cyst rupture
Ruptured gastrocnemius
Reflex sympathetic dystrophy
♠*Pelvic Tumor
Idiopathic
Hypoalbuminemia
Cirrhosis
Lymphedema
Renal failure, nephrotic syndrome
♠Myxedema
Facial flushing (6/1/10)
Emotional
Menopause
Alcohol
Rosacea
Drugs (calcium-channel blockers, nicotinic acid, others)
Heat exposure
Exercise
♠ Fever
Foods (spicy foods, cured meats, monosodium glutamate)
♠ Carcinoid
Cluster headache
♠ Serotonin syndrome
Dumping syndrome
♠ Bronchogenic carcinoma
♠ Medullary thyroid carcinoma
Systemic mastocytosis
♠ Pheochromocytoma
Facial pain
Sinusitis
Dental pain
TMJ syndrome
Trigeminal neuralgia
Herpes zoster
Salivary gland disorders
Migraine
Coronary disease
Aortic aneurysm
Fever (acute, uncertain source) (6/29/10)
♠Infections (pulmonary, gastrointestinal, urinary, sinusitis, skin, meningitis, bone, infectious mononucleosis, occult abscess)
♠Polymyalgia rheumatica
♠*Malignancy, tumor lysis syndrome
♠*Myocardial infarction
♠*Pulmonary embolus, deep vein thrombosis
Surgical site inflammation (seroma, hematoma)
♠Transfusion reaction
♠Stroke, subarachnoid hemorrhage, intracranial hemorrhage
♠Serotonin syndrome
♠Necrotizing fasciitis
Gout
♠Bowel ischemia, infarction
♠Hyperthyroidism
Connective tissue disorder
Pancreatitis
♠Endocarditis
Drugs (antibiotics, heparin, phenytoin)
Drug withdrawal (alcohol, opiates, barbituates, benzodiazepines)
♠Malignant hyperthermia
♠Neuroleptic malignant syndrome
Flank pain
Musculoskeletal
♠Kidney stone
♠Pyelonephritis
♠Diverticulitis
Herpes zoster
♠*Pneumonia
Influenza
♠Ruptured aneurysm
Genital skin lesion, genital ulcer (6/1/10)
Herpes simplex
Behcet's disease
♠ Cancer
♠ Syphilis
Chancroid
Lymphogranuloma venereum
### Headache

<table>
<thead>
<tr>
<th>(4/10/10)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Headache</strong></td>
</tr>
<tr>
<td>Daily withdrawal headaches</td>
</tr>
<tr>
<td>Migraine</td>
</tr>
<tr>
<td>Tension type headache</td>
</tr>
<tr>
<td>Caffeine withdrawal</td>
</tr>
<tr>
<td>*Drug adverse effect</td>
</tr>
<tr>
<td>Sinusitis</td>
</tr>
<tr>
<td>Viral syndrome, febrile illness</td>
</tr>
<tr>
<td>Temporomandibular joint syndrome</td>
</tr>
<tr>
<td>Cervical arthritis</td>
</tr>
<tr>
<td>Spinal headache (post lumbar puncture)</td>
</tr>
<tr>
<td>♠Temporal arteritis</td>
</tr>
<tr>
<td>♠*Subarachnoid hemorrhage</td>
</tr>
<tr>
<td>♠Carbon monoxide poisoning</td>
</tr>
<tr>
<td>Toxic exposures</td>
</tr>
<tr>
<td>Idiopathic thunderclap</td>
</tr>
<tr>
<td>♠Preeclampsia</td>
</tr>
<tr>
<td>♠Glaucoma</td>
</tr>
<tr>
<td>♠Meningitis/encephalitis/brain abscess</td>
</tr>
<tr>
<td>♠Cerebral aneurysm</td>
</tr>
<tr>
<td>♠Subdural hematoma</td>
</tr>
<tr>
<td>Neuralgias (e.g., trigeminal neuralgia)</td>
</tr>
<tr>
<td>Pseudotumor cerebri (intracranial hypertension)</td>
</tr>
<tr>
<td>Cluster headache</td>
</tr>
<tr>
<td>♠HSV encephalitis</td>
</tr>
<tr>
<td>♠Brain tumor</td>
</tr>
<tr>
<td>♠Arterial dissections</td>
</tr>
<tr>
<td>♠Cerebral venous sinus thrombosis</td>
</tr>
<tr>
<td>Spontaneous intracranial hypotension</td>
</tr>
<tr>
<td>Pituitary apoplexy</td>
</tr>
</tbody>
</table>
Hearing loss (deafness) (1/20/10)
Presbycusis
Cerumen
وشOtitis media, otitis externa
Noise exposure
وشAcoustic neuroma
Meniere's disease
Otosclerosis
وشSudden sensorineural hearing loss
وشDrugs (aspirin, gentamicin, furosemide)
وشStroke
وشHereditary
Trauma
وشNeoplasm
Hematuria (6/1/10)
Transient unexplained hematuria
Urinary tract infection
Stones
Menstruation (contaminated urine)
Exercise
Trauma
Benign prostatic hypertrophy
Tumor
Prostatitis
Glomerular disease (IgA nephropathy, hereditary nephritis)
Hypercalciuria
Hyperuricosuria
Tuberculosis
Hypotension, shock

- Hemorrhage (trauma, GI bleeding)
- Hypovolemia
- Vomiting, diarrhea
- Pancreatitis
- *Drugs (e.g., antihypertensives)
- *Cardiomyopathy
- *Myocardial infarction
- *Aortic stenosis
- *Arrhythmias
- *Peritonitis
- *Anaphylaxis
- *Pulmonary embolus
- *Ruptured aneurysm
- *Pneumothorax
- *Sepsis
- Aortic stenosis
- Hypertrophic cardiomyopathy
- Hypothyroidism
- Cardiac tamponade
- Addison's disease/Adrenal insufficiency/hemorrhage
- Atrial myxoma
Leg pain, bone pain, extremity pain (2/11/10)
Arthritis
♠ Fracture, trauma
♠ Gout
Varicose veins
♠ Cellulitis
♠ Deep vein thrombosis
Lumbar disc disease
Neuropathy (e.g., diabetic)
Ruptured Baker's cyst
Ruptured plantaris muscle
Vitamin D deficiency
♠ Compartment syndrome
♠ Rhabdomyolysis
Shin splints
RSD, complex regional pain syndrome
♠ Osteomyelitis
♠ Arterial occlusion
Gastrocnemius tear
♠ Sickle cell crisis
♠ Leukemia
Limp in child  
(6/1/10)

Transient synovitis
Fractures (toddlers, stress, foot, abuse)
Soft tissue trauma
Osgood-Schlatter's disease
Slipped capital femoral epiphysis
Legg-Perthes
Osteochondritis dessicans
Hip dysplasia
Tumors
Conversion disorder
Leukemia
Septic arthritis
Osteomyelitis
Diskitis
Muscular dystrophy
<table>
<thead>
<tr>
<th>Lymphadenopathy</th>
<th>(1/20/10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viral syndrome</td>
<td></td>
</tr>
<tr>
<td>Infectious mononucleosis</td>
<td></td>
</tr>
<tr>
<td>Cat scratch disease</td>
<td></td>
</tr>
<tr>
<td>♠Malignancy (lymphoma, leukemia, metastases)</td>
<td></td>
</tr>
<tr>
<td>♠HIV</td>
<td></td>
</tr>
<tr>
<td>♠*Tuberculosis, atypical mycobacteria</td>
<td></td>
</tr>
<tr>
<td>♠Tularemia</td>
<td></td>
</tr>
<tr>
<td>Lupus</td>
<td></td>
</tr>
<tr>
<td>♠Fungal infection (histoplasmosis, coccidiomycosis, cryptococcis)</td>
<td></td>
</tr>
<tr>
<td>Medications (phenytoin, serum sickness)</td>
<td></td>
</tr>
<tr>
<td>♠Brucellosis</td>
<td></td>
</tr>
<tr>
<td>♠Leptospirosis</td>
<td></td>
</tr>
<tr>
<td>♠Syphilis</td>
<td></td>
</tr>
<tr>
<td>♠Lyme disease</td>
<td></td>
</tr>
<tr>
<td>Sarcoidosis</td>
<td></td>
</tr>
<tr>
<td>Amyloidosis</td>
<td></td>
</tr>
<tr>
<td>Rubella</td>
<td></td>
</tr>
</tbody>
</table>
Mental status, acute change (coma, lethargy) (1/20/10)

- Delirium
- Alcohol
- Psychosis
- Drug overdose
- Hypoglycemia
- Intracranial hemorrhage
- Seizure (postictal)
- Urinary Retention
- Hypoxia
- CO2 narcosis
- Pneumonia
- Head trauma
- Sepsis
- Meningitis, encephalitis
- Electrolyte abnormality
- Psychiatric
- Heart failure
- Hypotension
- Brain stem stroke
- Disturbance of Ca, Mg, Na, K, P
- Thyroid disease
- Hypothermia
- Liver failure
- Renal failure
- Brain tumor with herniation
Muscle cramps (1/20/10)
Idiopathic, ordinary, nocturnal
Heat-induced (volume depletion, hyponatremia)
*Drug induced (nifedipine, beta blockers)
Hemodialysis (volume and electrolyte shifts)
Lower motor neuron (injury, ALS, compression)
Writer's cramp
Hypocalcemia
Hypomagnesemia
Respiratory alkalosis
Hypokalemia
Thyroid disease
McArdle's disease (glycogen storage disease)
Myalgias, arthralgias (generalized) (6/22/10)
Influenza
Viral syndrome, infections
Fibromyalgia
♣ Statins
Vitamin D deficiency
♣ Hypothyroidism
♣ Polymyalgia rheumatica
♣ Rhabdomyolysis
Polymyositis, dermatomyositis
* Psychiatric
♣ Lyme disease
♣ Hypophosphatemia
Lupus, rheumatoid arthritis
Nausea, vomiting  
Gastroenteritis, gastritis  
Drugs (opioids, iron, chemo)  Acute intermittent porphyria  
Pregnancy  
Migraine  
*Appendicitis  
*Bowel obstruction  
Gastroparesis (diabetes)  
Eating disorder  
*Pyelonephritis  
Irritable bowel syndrome  
Peptic ulcer disease  
Psychogenic vomiting, anxiety, depression  
Pain (esp. visceral)  
Severe coughing  
*Pancreatic carcinoma  
*Cholecystitis  
*Brain tumor  
Pseudotumor cerebri  
*Pancreatitis  
*Hepatitis  
*Myocardial infarction  
Crohn's disease  
*Glaucoma  
Mesenteric ischemia  
*Intracranial hemorrhage  
*Intracranial abscess, meningitis  
Inner ear (e.g., labyrinthitis, Meniere's)  
*Uremia  
*Diabetic ketoacidosis  
Food poisoning  
*Thyroid disorders
*Congestive heart failure
Parathyroid disorders
Cyclic vomiting syndrome
*Addison's disease, adrenal insufficiency
*Serotonin syndrome
Numbness, sensory loss (4/24/10)
Peripheral neuropathy, Diabetes
Compression neuropathy
Disk disease
Carpal tunnel syndrome
Meralgia paresthetica
Herpes Zoster
♠*Stroke
Multiple sclerosis
Alcoholism
Drugs (vincristine, amiodarone, lithium, others)
♠ Brain or cord tumor
Idiopathic
Amyloidosis
♠HIV
♠Heavy metal poisoning (lead, mercury)
Paraneoplastic syndrome
♠Hypocalcemia
Chronic liver disease
♠Lyme disease
♠B12 deficiency, Vitamin B6 deficiency
Porphyria
Pruritus

Dry skin
Atopic dermatitis
Contact dermatitis
Urticaria
Lichen simplex chronicus
Scabies
Diabetes
Drugs (narcotics, allergic reaction, cholestasis)
Pregnancy, third trimester
Psychiatric (delusional parasitosis)
Cholestasis
Lichen planus
Dermatitis herpetiformis
Renal disease
♠HIV
♠Malignancy (Hodgkins lymphoma, polycythemia vera)
♠Thyroid disease
Iron deficiency anemia
Rash, generalized

(7/23/10)

Eczema, atopic
*Drug reaction
Contact dermatitis
Insect bites
Viral exanthem
Urticaria
Poison ivy
Folliculitis
Seborrheic dermatitis
Psoriasis
Tinea corporis
Guttate psoriasis
Candida
Keratosis pilaris
Pityriasis rosea
Lichen planus
Roseola
Scabies
Numular eczema
*Fifth Disease
*Lyme disease
Miliaria rubra (prickly heat)
*Mycosis fungoides
*Mycosis fungoides
Erythema multiforme
Dermatitis herpetiformis
Id reaction
*Scarlet Fever
*Stevens-Johnson syndrome
*Kawasaki’s disease
Unilateral lateral thoracic syndrome
Chicken pox (Varicella)
HIV acute exanthem
Lupus (subacute cutaneous)
Sweet's syndrome
♠Secondary syphilis
♠Meningococcemia
Red eye
Viral conjunctivitis
Allergic conjunctivitis
Stye (hordeolum)
Chalazion
Blepharitis
Dry eye syndrome
Subconjunctival hemorrhage
Contact lens over wear
♣ Episcleritis, scleritis
♣ Foreign body
Trauma
♣ Bacterial conjunctivitis
♣ Acute angle closure glaucoma
♣ Iritis
♣ Keratitis, bacterial, viral
♣ Hyperthyroidism

(2/11/10)
Scrotal pain
Idiopathic orchialgia
Inguinal hernia
Ureteral stone
Epididymitis, orchitis
♠Testicular torsion
Torsion of appendix testis
♠Fornier's gangrene
♠Testicular cancer

(1/20/10)
Seizure
(6/1/10)
Imitators (vasovagal syncope, pseudoseizures, transient ischemic attack)
Epilepsy
Alcohol and drug withdrawal
♠ Head trauma
♠ Hypoglycemia
♠ Hyponatremia
♠ Hypoxia
♠* Stroke
♠ Brain tumor
♠ Intracranial infection
♠ Drug intoxication
♠ Hypomagnesemia
♠ Hypocalcemia
Shoulder pain
Shoulder joint disease
Cervical radiculopathy
Biliary disease
♠*Myocardial infarction
♠Intra-abdominal bleeding (ectopic, ruptured ovarian cyst)
♠*Pneumonia
♠Polymyalgia rheumatica
♠*Lung tumor
♠Ruptured abdominal viscus
♠Ruptured spleen
♠Abdominal malignancy
Pericarditis
Sinus tachycardia (1/20/10)
Anxiety, emotional stress
Pain
Recent physical exertion
COPD
♠ Infections, fever
Pregnancy (10 to 20 BPM at term)
* Drugs (alcohol, amitriptyline, amphetamines, amyl nitrite, anticholinergics, atropine, beta blocker withdrawal, bupropion, caffeine, cilostazol, cocaine, ephedrine, epinephrine, isoproterenol, nicotine, tobacco)
Diabetic cardiovascular autonomic neuropathy
♠ * Myocardial infarction
♠ * Pulmonary embolus
♠ * Pneumonia
♠ * Anemia
♠ Hemorrhage
♠ Hypotension, shock
♠ Hypovolemia, dehydration
♠ Hyperthyroidism
♠ Hypoglycemia
♠ Heart failure, pulmonary edema
♠ Cardiomyopathy, myocarditis
♠ Pericarditis
♠ Acute mitral regurgitation
♠ Pneumothorax
♠ Aortic insufficiency
♠ Hypoxia
♠ Serotonin syndrome
Inappropriate sinus tachycardia
Postural orthostatic tachycardia syndrome (POTS)
Chronic nonparoxysmal sinus tachycardia

Copyright © by the Association of American Medical Colleges. Unauthorized reproduction is prohibited.
Pheochromocytoma
Syncope

Vasovagal
Hyperventilation
*Drugs
Panic attack
Orthostatic hypotension
Autonomic insufficiency
Valsalva
♠*Anemia
♠Arrhythmias
♠Hypoglycemia
♠Seizure, pseudoseizure
♠GI bleeding
♠Valvular heart disease, aortic stenosis
♠*Pulmonary embolus
♠*Myocardial infarction
♠Hypoxia
♠Aortic dissection
♠Adrenal insufficiency, Addison's disease
Cough syncope
Micturition syncope
♠Hypertrophic cardiomyopathy
♠Cardiac tamponade
♠*Cerebrovascular (TIA, stroke)
Atrial myxoma

(2/11/10)
Tinnitus (1/20/10)
Idiopathic
Presbycusis
Noise-induced hearing loss
Meniere’s disease
Drugs (aspirin, antibiotics, loop diuretics, chemotherapy)
♣ Acoustic neuroma
Congenital hearing loss
Cochlear trauma
♠ Vascular, pulsatile (arteriovenous malformation, bruit, fistula)
Tremor (1/20/10)
Physiologic tremor
Essential tremor, familial tremor
Parkinson’s disease
♠Hyperthyroidism
♠Tardive dyskinesia
Anxiety
Medications (bronchodilators, caffeine, steroids, lithium)
Drug withdrawal
Orthostatic tremor
♠Cerebellar disease
♠Midbrain stroke
Multiple sclerosis
♠Serotonin syndrome
♠Carcinoid
♠Wilson's disease
♠Pheochromocytoma
Urinary symptoms (dysuria, frequency, urgency) 6/17/10

- Urinary tract infection
- Urethritis (chlamydia, gonococcus, unknown)
- Vaginitis
- Atrophic vaginitis
- Genital herpes
- Interstitial cystitis
- Irritant urethritis
- Daytime frequency of childhood syndrome
- Prostatitis
- Reactive arthritis (Reiter's syndrome)
- Hypercalciuria
- Psychiatric
Vertigo
Benign Positional Vertigo
Meniere's disease
Vestibular neuronitis, acute labyrinthitis
♠Acoustic neuroma
Post-concussion syndrome
♠Otitis media
Barotrauma, ruptured oval window, perilymph leak
Migrainous vertigo
Otosclerosis
♠Vertebral artery dissection
♠*Brain stem stroke
Psychiatric
♠Drugs (gentamicin, furosemide)
Weakness, fatigue, malaise, vague symptoms

Obstructive sleep apnea
Depression, anxiety
Deconditioning
Drugs (beta blocker, clonidine, alcohol)
Chronic fatigue syndrome, fibromyalgia
Infections, infectious mononucleosis, hepatitis, pneumonia
Pregnancy
Anemia
Vitamin D deficiency
Hypothyroidism, hyperthyroidism
Hypokalemia, hyponatremia
Myocardial infarction
Celiac disease
Disturbance of calcium, phosphorus, magnesium
Polymyalgia rheumatica/Temporal arteritis
Parkinson disease
Hypogonadism
Myasthenia gravis
Heart failure, myocarditis
Pulmonary, hepatic, renal failure
Multiple sclerosis
Adrenal insufficiency, Addison’s disease
B12 deficiency
Botulism
Black widow spider bite
**Weight loss** (1/20/10)
- Depression
- Chronic obstructive pulmonary disease
- Drugs
- Dementia
- ♠*Malignancy
- Eating disorder
- Anorexia of aging
- *Diabetes
- ♠Hyperthyroidism
- ♠HIV
- ♠*Tuberculosis
- ♠Adrenal insufficiency
- ♠Uremia
- Liver disease
- Intestinal parasites
- Malabsorption
- Inflammatory bowel disease