

MUSCULOSKELETAL RHEUMATOLOGY

Condition	Fact / Association	Condition	Fact / Association
Anterior Shoulder Dislocation	Abducted, externally rotated. Axillary nerve affected	Spinal Stenosis	Shopping cart sign (pain relieved with forward bending)
Posterior Shoulder Dislocation	Adducted, internally rotated. Electrical injury, lightning, seizure	Avascular Necrosis	Femoral neck fracture, limp, frog leg lateral X-ray
Rotator Cuff Tear	Empty can test	Legg-Calve-Perthes	Knee pain, avascular necrosis of hip
Mid-Shaft Humerus Fracture	Wrist drop (radial nerve)	Slipped capital Femoral Epiphysis	Obese. X-ray: posterior displacement of the femoral epiphysis.
Clavicle Fracture	middle third most commonly affected. Treat with sling	Developmental Hip Dysplasia	Positive Ortolani and Barlow test. Palpable clunk. Pavlick harness
Supracondylar Fracture	Children. Median nerve and brachial artery affected. Anterior sail and posterior fat pad sign. Gun stock deformity. Vollmann's contracture	Hip Fracture	External rotation and shortening
Elbow Dislocation	Posterior dislocation most common	ACL	Deceleration, hyperextension, pop, and swelling. Positive lachman or anterior drawer test
Scaphoid Fracture	FOOSH. Snuffbox tenderness. Thumb spica splint	Meniscal Tear	Mechanical symptoms. Baker cyst. Positive McMurry and Apley test
Carpal Tunnel Syndrome	Median nerve. Phalen Sign. Tinel Sign. Compression test. Thenar eminence atrophy	Osgood-Schaltrer Disease	Knee pain worse with exercise. Children. Tenderness over tibial tuberosity.
Boxer Fracture	5th metacarpal fracture. Ulnar gutter splint	Achilles Ankle Tear	Positive Thompson test
Dequervain Tenosynovitis	Pregnancy. Finklestein test	Osteomyelitis	Staph aureus
Chronic Bronchitis	Smoking, decreased FEV1	Ewing Sarcoma	Moth eaten pattern and onion peel appearance
Ankylosing spondylitis	Young male, HLA B27, Bamboo sign	Osteoarthritis	Knee. Bouchard (PIP) and Heberdens (DIP) nodes
Cuada Equina	Bowel/bladder incontinence, saddle paresthesia	Osteoporosis	Risk factors: Smoking, glucocorticoids, amenorrhea
		Osteosarcoma	Sunburst pattern

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RHEUMATOLOGY*

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Compartment Syndrome	pain out of proportion. 6 Ps: pain, pressure, paresthesia, pulselessness, pallor, paralysis	Scleroderma	Fibrosis. Calcinosis, Raynaud phenomenon, GERD, sclerodactyly, telangiectasia. Anticentromere antibodies. SCL-70 antibodies
RA	Bilateral symmetric and progressive. Boutonniere and Swan neck deformity. Felty syndrome: rheumatoid arthritis, splenomegaly and neutropenia	Sjogren	Dry eyes. Positive Shirmer. Positive anti-ro (SSA) and anti-SsB (SSB) antibodies. Oral candida and non-hodgkin lymphoma association.
Fibromyalgia	Women, depression, pain	Gout	Monoarticular. podagra. needle shaped negatively birefringent crystals under polarized light
Psuedogout	Calcium pyrophosphate. Positive birefringent rhomboid shaped crystals		
Juvenile RA	Polyarthrititis, spiking fevers, salmon colored rash. Risk of uveitis.		
Polyarteritis Nodosa	Hepatitis B (etiology). Livedo reticularis, mononeuritis multiplex.		
Polymyositis	Progressive proximal muscle weakness, dysphagia		
Dermatomyositis	Heliotrope rash, gutterson papules, shawl sign. Risk of malignancy. Anti-jo-1 and Mi-2 antibodies		
Polymyalgia Rheumatica	> 50 years of age. Giant Cell arteritis		
Reactive Arthritis	GI/GU infection, urethritis, conjunctivitis		
SLE	Malar rash, Positive ANA, discoid rash. Double stranded DNA and anti-Smith antibodies		

GASTROENTEROLOGY

Condition	Fact / Association	Condition	Fact / Association
GERD	Relaxed LES. Chronic cough. Aggravated by caffeine, obesity, ETOH, tobacco. PPI	Diverticulosis	Red meat and fat. LLQ pain. Constipation. Colonoscopy
Esophagitis	HIV = Candida	Diverticulitis	Infection. CT scan. Augmentin. Cipro + Metronidazole
Zenker Diverticulum	Undigested food	Crohn's	Skip lesions, transmural, fistulas ASCA positive. 5-asa
Achalasia	Birds beak	UC	Colon, pANCA positive. 5-ASA
Plummer Vincent Syndrome	Iron therapy	Intussusception	Abdominal pain, current jelly stool, vomiting. Diagnostic enema
Mallory Weis Tear	Coughing/Vomitting = blood	IBS	pain relieved with defecation
Esophageal Varices	Bleed = Ocreotide/fluoroquinolone followed by TIPS. Beta blockers to prevent bleeding	Small bowel obstruction	Abdominal X-rays - dilated loop of bowel with air fluid levels
Dyspepsia	>55 = scope	Toxic megacolon	>6cm dilation
Gastric cancer	Hpylori, ETOH, and smoking. Palpable mass. Gastric ulcers = repeat endoscopy to rule out cancer.	Indirect hernia	Scrotal mass
Pyloric Stenosis	Projectile vomiting; olive sign	Umbilical hernia	Self resolves by 3 years of age
Cholecystitis	Murphys Sign. Referred pain to right shoulder	Infectious Diarrhea	Blood, WBC. Campylobacter Fluroquinolone
Cirrhosis	Hepatitis C and ETOH		
Pancreatitis	Epigastric pain radiating to the back. Increased lipase >3x		
Appendicitis	Periumbilical then RLQ. McBurney's point. Clinical diagnosis		
Celiac Disease	Tissue transglutaminase and endomysial antibody. Gluten free		

NEUROLOGY

Condition	Fact / Association	Condition	Fact / Association
Migraine	Unilateral. Pulsating. Photophobia. Aura. 4-72 hours. Triptan.	GBS	Ascending weakness/paralysis. Absent DTR. Campylobacter infection. IVIG or plasma exchange.
Cluster	Headache + Lacrimation + rhinorrhea. Men. 100% oxygen.	Dementia	Gradual. Progressive. TSH and Vitamin B12. Cholinesterase inhibitor. Memantine.
Tension	Bilateral. Band like	Delirium	Acute. Reversible. Fluctuations of consciousness.
Encephalitis	Confused or altered mental status. Fever. HSV. CT scan, then LP	Multiple Sclerosis	Affects white matter. > 2 distinct episodes. Women. Sensory symptoms. Optic neuritis. Oligoclonal bands. Glucocorticoids.
Meningitis	Brudzinski. Kernig. Fever. CT and LP. Dexamethasone, ceftriaxone, vancomycin.	Myasthenia Gravis	Muscle weakness. Acetylcholine receptor antibodies. Worse at the end of day. Ptosis and diplopia. EMG. Thymectomy < 60 or with thymoma.
Essential Tremor	Not a rest. Improves with alcohol. Treat with propranolol.	Seizure	Postictal confusion. Tongue biting. Urination. Foaming of mouth.
Huntington Disease	Chorea, psychiatric change, dementia. Genetic testing. Tetrabenazine. Quetiapine.	Absence	Petit mal. Generalized. Children. Staring. Lip smacking. Ethosuximide.
Parkinsons	Decrease dopamine. Pill rolling. Cogwheel rigidity, Shuffling gait. Anticholinergics. Levodopa-carbidopa.	Status Epilepticus	> 5min. Benzodiazepine. Fosphenytoin or phenytoin. Phenobarbital.
SAH	Berry aneurism. Anterior circle of willis. Stop smoking. Thunderclap headache, meningeal signs + LOC. CT and LP.		
Stroke	Ischemic > Hemorrhage. Facial paresis, arm drift/weakness, abnormal speech. CT scan. TPA <4.5 hours. Angiography.		
TIA	Signs and symptoms of stroke without infarct		
Concussion	Confusion and amnesia. Post concussion syndrome.		

CARDIOLOGY

Condition	Fact / Association	Condition	Fact / Association
CHF	Orthopnea, paroxysmal nocturnal dyspnea, jugular venous distention, S3	ACS	UA, STEMI, NSTEMI, Morphine, Nitrates, loading dose of P2y12
HOCM	Sudden death in athlete	Cocaine Induced MI	NO Betablockers, give benzodiazepines
Atrial Septal Defect	Fixed wide splitting of S2	Aortic Aneurysm	Tobacco - ultrasound > 65
Coarctation of Aorta	X-Ray, Rib notching, 3 sign	Aortic Dissection	Marfan Syndrome, ehlers danlos Syndrome, Tearing chest pain, Wide mediastinum
PDA	Machine like murmur	GCA	Jaw claudication, Visual disturbance, >50 years of age. Elevated ESR
Tetralogy of Fallot	Cyanosis with crying or feeding	PAD	Leg pain relieved with rest, cilostazol
VSD	Holosystolic Murmur	Superficial Thrombophlebitis	Palpable Cord
Cardiogenic Shock	Hypotensive, cool, clammy skin, and MI	DVT	Virchow's Triad, unilateral LE swelling, pain, and erythema. Homan sign
Atrial Fibrillation	Irregularly irregular rhythm	Murmurs	Squatting/leg raise/ handgrip increases the sound of all murmurs except MVP and HOCM
Atrial Flutter	Saw tooth pattern	Aortic Stenosis	Systolic, 2nd right intercostal space, radiates to neck
AV Block	Long PR interval	Mitral regurgitation	Holosystolic murmur
Mobitz 1	Progressively lengthening PR Interval	MVP	Women, anxiety, mid-systolic click
Mobitz 2	Dropped QRS without lengthening	Aortic Regurgitation	Wide pulse pressure. Water hammer pulse
Third Degree Block	Independent P wave and QRS complex	Endocarditis	New murmur, fever, injection drug use, streptococcus viridans, Jane way lesions, Osler nodes, Roth Spots
Paroxysmal Supraventricular Tachycardia	Narrow complex tachycardia	Pericarditis	Pleuritic chest pain. Worse upon laying, Improves with sitting. ST segment elevation, PR depression
Stable Angina	Chest pain relieved with rest		
Prinzmetal Angina	Diffuse ST segment elevations, coronary artery spasm		

INFECTIOUS DISEASE

Condition	Fact / Association	Condition	Fact / Association
Cryptococcus	Fungus. Lungs. CNS. HIV. Papilledema CT scan. Cryptococcal antigen. India Ink stain. Amphotericin B. Fluconazole	EBV	Mononucleosis. Pharyngitis. Posterior cervical lymph nodes Morbilliform rash with amoxicillin/ampicillin. Splenomegaly
Histoplasmosis	Fungus. Bird and Bat droppings. Lung. Hilar/Mediastinal lymphadenopathy. Histoplasma antigen. Itraconazole.	HSV	Painful vesicles that ulcerate. Prodrome. PCR, culture, or serology. Antivirals
Pneumocystis	AIDS. < 200 CD4. Bilateral interstitial infiltrates. Trimethoprim/sulfamethoxazole	Herpes Zoster	Varicella Zoster virus. > 50 years old women. pain before rash. Dermatome. Hutchinsonian sign Post herpetic neuralgia. Antivirals
Rheumatic Fever	Strep pharyngitis. 2 weeks post infection. Jones criteria. Penicillin.	Measles	Cough, coryza, conjunctivitis. koplik spots
Botulism	Descending weakness/paralysis. Canned food. Raw honey in infants. Penicillin. Antitoxin	Mumps	Parotid gland swelling. Elevated Amylase
Cholera	Profuse rice watery diarrhea	Rubella	Forchheimer spots
Diphtheria	Pharyngitis. Gray membrane. Antitoxin. Penicillin or erythromycin.	Erythema infectiosum	Slapped cheek appearance. Parvovirus B19
Tetanus	Trismus (lock jaw) Contraction. Spasms. Dirty wound. Immunization	Roseola	High fever, resolves, followed by rash. Herpes virus 6/7. 6 months of age.
TB	Mycoplasma. Night sweats. Productive cough. Hemoptysis. CXR. Acid fast bacilli smear. RIPE. Isoniazid + B6	HIV	Attacks CD4 cells. Asymptomatic.ELISA. Western blot. Everyone is treated. Two NRTI and NNRTI
Toxoplasmosis	Cat feces. Undercooked meat. Pregnancy. Cerebral abscess. Multiple ring enhancing lesions.	Rocky Mountain spotted fever	Dog tick. Rash on wrists spreading centrally. Affects palms and soles Doxycycline
Lyme	Deer tick. Northeastern states. Erythema migrans. Carditis. AV block. Bells palsy. Clinical Diagnosis. Doxycycline, amoxicillin, cefuroxime.	Syphilis	Treponema. Painless genital ulcer Rash affecting palms and soles Dark field microscopy. RPR. FTA ABS. Penicillin

HEMATOLOGY

Condition	Fact / Association	Condition	Fact / Association
B12 Deficiency	Megaloblastic. Peripheral neuropathy. MMA	Immune Thrombocytopenia	Shiga Toxin producing E. coli 0157:H7. Quinine. Microangiopathic hemolytic anemia and thrombocytopenia
Folate Deficiency	Megaloblastic. No neuro symptoms		
Iron Deficiency	Blood loss. Microcytic. Low ferritin.	AML	65. Myeloid. Auer rod. Phi bodies. M3 all-trans-retinoic acid. > 20% blasts
Anemia of chronic disease	Microcytic/normocytic. Normal ferritin.	ALL	Children. Lymphoid. > 20% blasts. TdT
Hemolysis	Increased LDH, reticulocyte, Indirect bilirubin. Decreased haptoglobin.	CML	Neutrophils. Basophilia. Leukocytosis. 9:22 translocation. Philadelphia chromosome. Tyrosine Kinase Inhibitors
Aplastic Anemia	Pancytopenia. Low retic count. Bone biopsy.	CLL	Non functioning B cells. Lymphadenopathy. Lymphocytosis. Flow cytometry. Rituximab
G6PD	X-linked enzyme deficiency. Infection. Fava beans. Bite cells. Heinz body		
Von Willebrand	Most common bleeding disorder. Elevated aPTT. Von willebrand factor activity. RIPA. Desmopressin	Hodgkin Lymphoma	Painless cervical lymphadenopathy. B symptoms. Reed Sternberg cells. Mediastinal mass. Excisional node biopsy
Hemophilia	X-linked recessive disorder. Hemarthrosis. Normal Platelets. prolonged aPTT.		
Factor V Leiden	Thrombophilia. DVT. PE. No screening.	Multiple Myeloma	Plasma cells. IgG, IgA. Bence Jones Protein. Rouleaux Formation. > 10% clonal plasma cells
Antiphospholipid Syndrome	Anticardiolipin antibody. Recurrent pregnancy loss. Prolonged aPTT. Russel Viper Venom test. DVT	Sickle cell	Vaso occlusion. Hemolytic anemia. Cold, Hypoxia, alcohol, infection. Howell Jolly bodies. Penicillin < 5 years of age. Hydroxyurea.
Heparin Induced Thrombocytopenia	4 > days. Thrombosis. ELISA. Venous limb gangrene		

PULMONOLOGY

Condition	Fact / Association	Condition	Fact / Association
Asthma	Wheezing, reversible airway disorder. Samters triad: Asthma, ASA allergy, nasal polyp. Reduced FEV1 to FVC ratio	PE	Virchows triad, sinus tachycardia, pleuritic chest pain, S1Q3T3, Westermark sign, Hampton hump
Acute Bronchitis	Viral, cough, negative CXR		
Bronchiolitis	RSV	Asbestosis	Insulation, ship building
Epiglottitis	HIB. Hot potato voice, sniffing position, drooling. X-ray: Thumb sign		
Croup	Barking cough. X-ray: Steeple sign	Silicosis	Sandblasting, mines, egg shell calcification
Pertussis	Inspiratory whoop		
Pneumonia	Productive cough, pleuritic chest pain, fever. lobar consolidation = bacteria. bilateral interstitial infiltrates = viral/pneumocystis	Coal Workers Pneumoconiosis	Coal
TB	Fever, night sweats, hemoptysis. AFB/culture x 3 days. RIPE therapy. Screen with TNF inhibitors, immigration	Beryllium	Aerospace, electrical plants
Carcinoid Syndrome	Diarrhea, flushing, bronchospasm		
Bronchiectasis	Cystic fibrosis. Tram lines. Obstructive pattern.	Sarcoidosis	Non caseating granulomas, erythema nodosum, bilateral hilar adenopathy, elevated ACE
Emphysema	Smoking, alpha 1 antitrypsin deficiency, barrel chest, decreased DLCO and FEV1		
Chronic Bronchitis	Smoking, decreased FEV1	Pneumothorax	Smoking, family history, males tall/skinny, pleuritic chest pain
Cystic Fibrosis	Autosomal recessive, infertility, sweat chloride test		

ENDOCRINOLOGY

Condition	Fact / Association	Condition	Fact / Association
Primary hyperparathyroid	Elevated PTH and calcium. Low phosphate. Short QT interval. Bones, stones, and moans, psych groans	Type 1 DM	Low C-peptide. Antibodies. Islet cell destruction.
Secondary hyperparathyroid	Elevated PTH. Normal/Low calcium. Renal failure and Vit D deficiency	Type 2 DM	Insulin insensitivity. Weight gain. Metformin.
Hypoparathyroid	Neck Surgery. Chvostek and Trousseau. Prolonged QT	Diabetic Ketoacidosis	Hyperglycemia(< 1,000 (b usually about 350). Type 1. Anion gap metabolic acidosis and serum ketones. Infection. Hypokalemia
Graves	Eye and Skin manifestation	HHS	Glucose > 1,000. Type 2
Hyperthyroid Treatment	PTU - first trimester. methimazole - after first trimester	Hyperlipidemia	Triglycerides > 1,000 = pancreatitis. Statins first line
Central hypothyroid	Low TSH and Free T4. Check adrenal function	Prolactinemia	Galactorrhea, oligomenorrhea/amenorrhea. Hook effect. High TSH, MRI. Cabergoline.
Thyroid nodule	TSH. Ultrasound. Warm Nodules are benign. Cold nodules are cancer.		
Cushings	Pituitary adenoma. Lung tumor. Adrenal tumor. Low ACTH = adrenal. High ACTH = pituitary or lung.		
Addisons	Increased ACTH = adrenal. Low ACTH = pituitary. ACTH stimulation test. Hyponatremia and hyperkalemia. Fludrocortisone		
Adrenal cortical carcinoma	Androgen and/or estrogen secreting = cancer. CT scan. Surgery		
Acromegaly	Increased growth hormone. Pituitary tumor. Large hands/feet. Increased insulin like growth factor.		