

Pathology Chapter 2 & 3 Mus/skeletal & Skin System

Secondary gout- uric acid synthesis, or reduced ability to excrete uric acid due to excessive cellular breakdown or turnover as occurs in cancer, chronic hemolytic anemia or the use of cytotoxic drugs, excess sugar consumption/psoriasis, kidney disease, diuretic therapy, low dose aspirin, lactic acidosis or ketoacidosis. Lead toxicity can cause a specific type of gout called saturnine.

Signs and Symptoms: acute onset of intense joint pain (especially in the first joint of the big toe (intermittent symptoms), high blood uric acid, uric acid crystals are detected in subcutaneous tissue, bone, cartilage, joint, fluid and other tissues, uric acid kidney stones/an attack is usually precipitated by eating excess purine (high in meat and organ meats) over eating, fatigue, stress, infection and the administration of penicillin or insulin.

Pathophysiology: deposition of uric acid crystals in joints, tendons, kidneys and other tissues causing inflammation and damage.

Associated with bone calcium loss because it is leached out of the bones by the high acidity of the tissues.

Recommendations: p. 73 & 74

Rheumatoid Arthritis

It is a systemic autoimmune disease that is especially common with women, affecting connective tissue accompanied by thickening of the articular soft tissues with extension of synovial tissue over articular cartilages which become eroded- leads to deformities and disability.

Etiology: possibilities: virus, dysbiosis, leaky gut, poor digestion,
Signs and Symptoms: p. 76
Pathophysiology: autoimmunity that affects all connective tissue (cartilage, bone, ligaments, tendons, dermis, periosteum, synovial membranes and basement membranes). Great deal of chronic inflammation and destructive polyarthritis (inflammation of many joints), vasculitis and inflammation of the heart, spleen and lungs, drop in RBC's and WBC's and low grade fever
Recommendations: p.78-80

Ligament & Tendon Damage

Tendonitis is inflammation of a tendon, often due to repetitive strain injury (golfer's elbow, tennis elbow, rotator cuff tendonitis, pitcher's shoulder and swimmer's shoulder)

Tenosynovitis is inflammation of the tendon sheath which becomes distended with fluid (commonly affects flexor and extensor tendons of the fingers)

Ligament strain is over stretching of the ligament without tearing

Ligament sprain is a partial rupture or tearing of the ligament, sometimes with some muscle damage.

Etiology: Tendonitis and tensynovitis are commonly due to repetitive strain (overuse) of the affected muscles and tendons, while ligament strain and sprains are mostly due to traumatic injury

Signs and Symptoms: pain over the area, usually worse with use.

Pathophysiology: weakness leading to inflammation, pulls and tears

Recommendations: p.82 &83