**13. Gout By Ilana Ramer Bass**

**Overview:**

**Gout** = monosodium urate crystal depositon disease

* Caused by extracellular fluid urate saturation which exceeds solubility and the deposits in the joint spaces
* Natural history:
	+ Acute gouty arthritis
	+ Intercritical (or interval) gout (asymptomatic)
		- 62% have a 2nd attack within the 1st year; 78% within 2 years, 93% within 10 years
	+ Chronic articular and tophaceous gout
* Acute Gouty Arthritis
	+ First presentation is usually monarticular
	+ 80% of initial attacks involve the lower extremity, most often the base of the great toe (first MTP joint) called podagra
		- Severe pain, redness, warmth, swelling and disability
		- Onset more often at night—low cortisol levels
	+ Provoking factors:
		- Trauma, surgery, starvation, fatty foods, dehydration, any drugs that raise or lower serum urate concentrations (allopurinol, thiazide or loop diuretics, ASA), alcohol consumption, ingestion of meat/seafood
* Chronic tophaceous gout
	+ Collections of solid urate accompanied by chronic inflammatory and often destructive changes in the surrounding connective tissue

**Gout at IMA**

* If suspect gout, must confirm diagnosis with arthrocentesis and analysis of synovial fluid
* Refer to “MSK clinic” or “Rheumatology” for joint aspiration
	+ They will send cell count, differential, gram stain, culture, and look under polarizing light microscopy for crystals
	+ Must rule out: septic arthritis, trauma, pseudogout (calcium pyrophosphate depositon)
* Treatment algorithm:
	+ Any contraindication to NSAIDs (AKI, CKD, CHF, PUD, on A/C)?
		- 🡪 If not, then treat with NSAIDs- naproxen 500mg q12hrs or indomethacin 50mg q8hrs
		- 🡪 If yes, then treat with colchicine- not to exceed 1.8mg on the first day (can be taken 0.6mg three times that day or first dose 1.2mg followed by 0.6mg an hour later)
			* 🡪 If colchicine contraindicated (severe renal or liver disease) and only 1 joint involved, consider intra-articular glucocorticoids
				+ 🡪 If >2 joints involved, consider oral glucocorticoids (prednisone 30-40mg daily until resolution begins, then taper over 7-10 days)
	+ Start allopurinol AFTER the acute gouty attack
	+ Avoid thiazide/loop diuretics for blood pressure control in these patients