

RHEUMATOLOGY EMERGENCIES AND PITFALLS

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I HAVE NO DISCLOSURES

- ▣ Dangerous pitfalls
- ▣ The Difference RA makes
- ▣ Worrisome symptoms and what to do
- ▣ Feinberg's Pearls

Pitfalls

- ▣ The lab will help
- ▣ Its just a little arthritis
- ▣ It will get better with time
- ▣ If it looks like a duck and quacks like a duck its probably.....a zebra
- ▣ Its always related to the rheumatic disease
- ▣ Its never related to the rheumatic disease

LAB TESTING

- ▣ Rheumatoid Factor
 - 5% of the general population
 - Present in
 - ▣ Cancer
 - ▣ HIV
 - ▣ Infection
 - ▣ Liver disease
 - ▣ Sarcoid
 - ▣ Sjogren's syndrome
 - Not always present in RA
- ▣ Anti CCP – more specific
 - SLE, autoimmune hepatitis, sepsis, TB
 - 6.1% later develop RA

ANA testing

- ▣ Required for SLE?
- ▣ Present in many autoimmune diseases
- ▣ Present in Cancer
- ▣ Present in Infection

HLA B-27

- ▣ 95% will not develop spondyloarthropathy
- ▣ Back pain is very common
- ▣ Remember inflammatory back pain

Uric Acid

- ▣ Hyperuricemia is not Gout
- ▣ 6.7
- ▣ Target 6.0 or 50% decrease
- ▣ HLA B5801 and Allopurinol Hypersensitivity Syndrome
 - Thailand
 - Korea
 - Han Chinese
 - African

HIV

- ▣ Arthralgia
- ▣ Infectious Arthritis
- ▣ Reiter's Syndrome
- ▣ Psoriatic Arthritis
- ▣ Sjogren's Syndrome
- ▣ Spondyloarthropathy (undifferentiated)
- ▣ AIDS associated arthritis
- ▣ Avascular necrosis
- ▣ Myositis

ITS JUST A LITTLE
ARTHRITIS

Rheumatoid Arthritis

“The Most Common Rheumatic Disease Requiring ICU Admission”

Cabling M, Colburn K, Hawkins R. Rheumatoid Arthritis: An Emergency Physician's Perspective. *Emergency Medicine Reports* [serial online]. November 16, 2014;35(24):285-291.

Rheumatoid Arthritis

- ▣ A fatal illness
- ▣ Treat to target
- ▣ RA in the COVID era

MAJOR PROBLEMS TO WATCH FOR IN YOUR PATIENTS WITH RHEUMATOID ARTHRITIS

Shortness Of Breath

- ▣ Asthma
- ▣ CHF
- ▣ COPD
- ▣ Infection
- ▣ Anxiety
- ▣ Pericardial effusion
- ▣ Pleurisy
- ▣ Pleural effusion
- ▣ CAD
- ▣ PE
- ▣ ILD

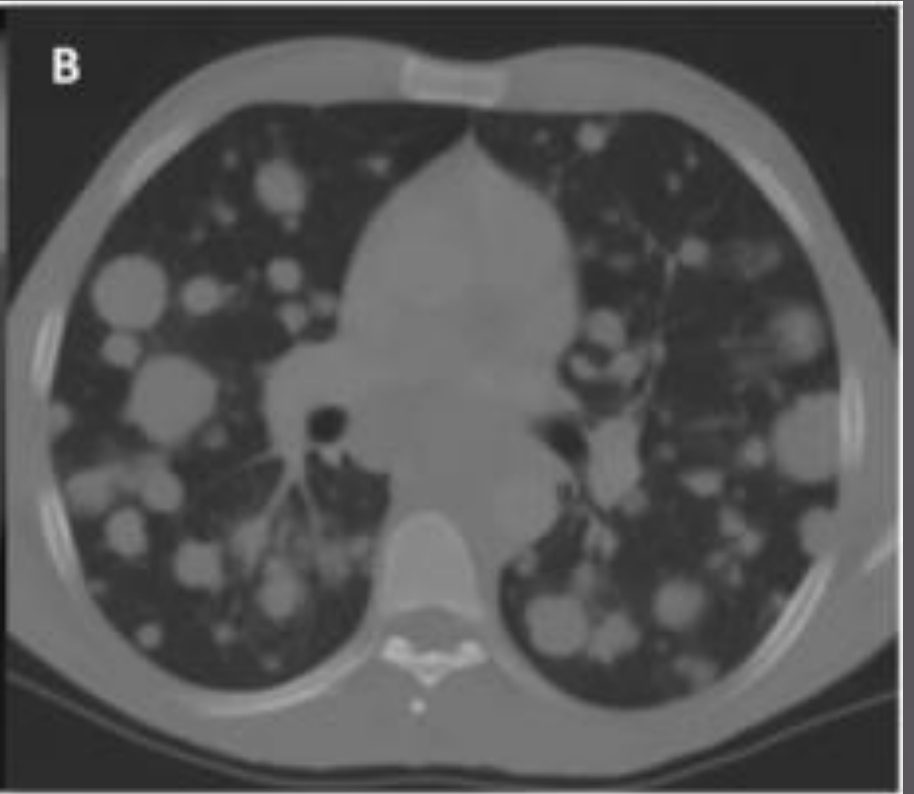
Rheumatoid Arthritis

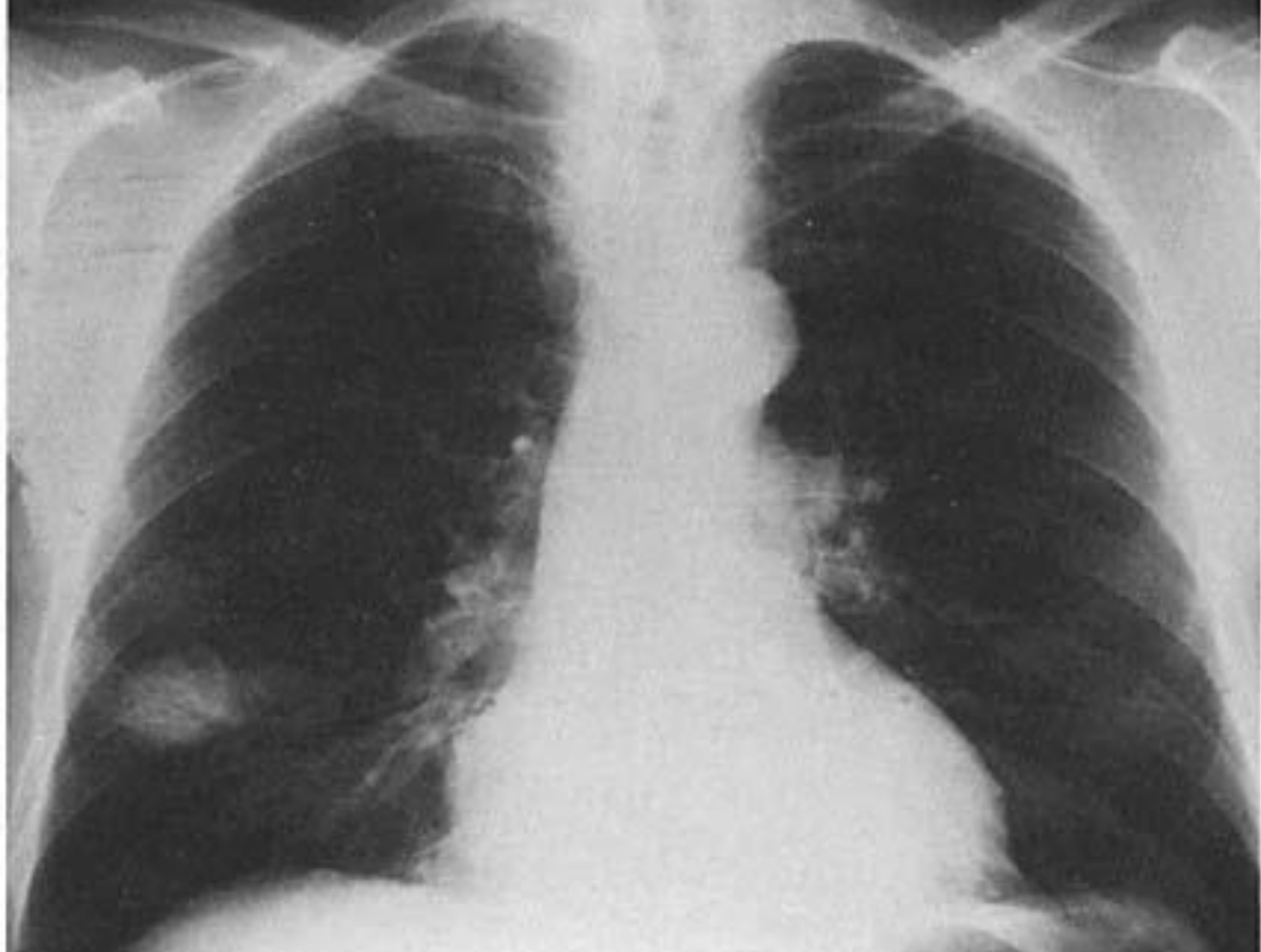
- ▣ CAD
- ▣ PE
- ▣ GI bleed
- ▣ Stroke
- ▣ Renal
- ▣ Increased pain
 - Disease Flair
 - N entrapment
 - **Depression**
 - Fibromyalgia

A 56 year old woman with Rheumatoid Arthritis presents with a cough

- 30 pack year smoking history
- Mild Hypertension well controlled on medication
- No current joint pain







Rheumatoid Arthritis

- ▣ ILD/Interstitial Fibrosis
- ▣ Pneumonitis
- ▣ Accelerated atherosclerosis
- ▣ Felty's Syndrome (splenomegaly, low WBC)
- ▣ Inflammatory eye disease
- ▣ Septic Arthritis
- ▣ Sepsis
- ▣ Acute renal failure
 - Medications
 - Sepsis
 - Acute GN
 - Rhabdo
 - Renal vein thrombosis

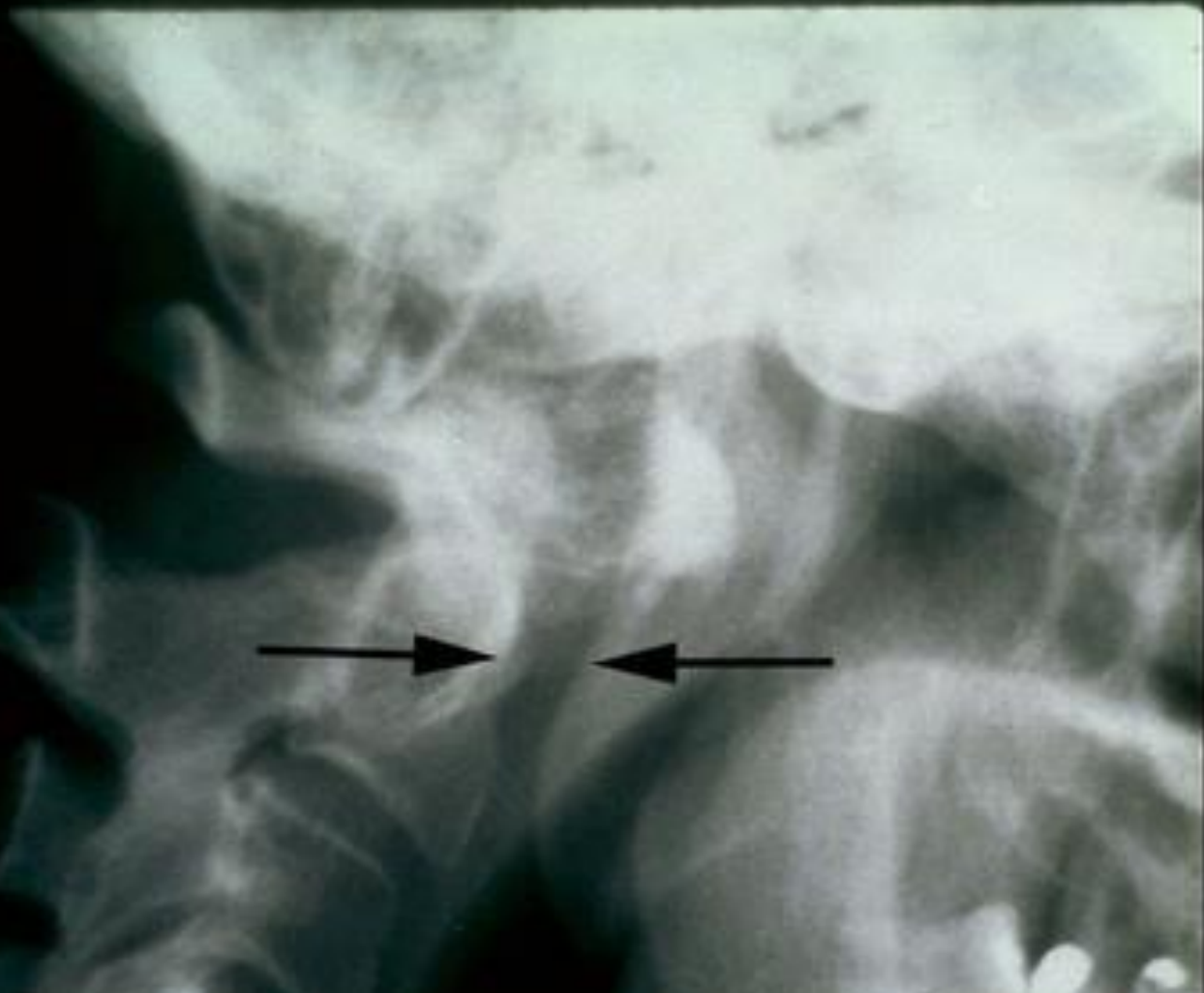
Rheumatoid Arthritis

Atlanto -Axial Subluxation

Or

“It’s Always Bad to Kill Your Patients”

Rheumatoid Arthritis



Pearls to Remember

- ▣ All inflammatory arthritis and autoimmune rheumatic disease patients should be considered an immunocompromised host
- ▣ Consider all rheumatic disease patients hypercoagulable
- ▣ Remember CAD in RA
- ▣ Remember PAH and ILD
- ▣ Remember the medications

Worrisome Symptoms and What to Do

Abdominal Pain

- ▣ Mesenteric Vasculitis
- ▣ Other medications
- ▣ Depression
- ▣ Diet
- ▣ Angina

Abdominal Pain

- ▣ NSAID's are a fatal treatment
 - 12.5% take NSAID for > 3 months
 - 50-60% of population over 65
 - 1-2% bleed (25% of all bleeding – AFP)
 - Perforation
 - Renal failure
 - HTN
 - Cardiac risk

Back Pain

Back Pain

- ▣ Inflammatory vs non Inflammatory
- ▣ Treatment of Non inflammatory back pain

Osteoporosis

- ▣ Should be suspected in
 - all women over age 50 Age 65 ?
 - All men over 60 Age 72 ?
 - Anyone on steroids or with a chronic disease which is frequently treated with steroids
 - Anyone with a rheumatic disease
- ▣ Acute presentation
 - Fracture
 - Back pain

- ▣ Back Pain
- ▣ Fatigue
- ▣ GI upset
- ▣ “I just don’t feel well”

Suicide

- ▣ OA, Fibromyalgia, SLE, RA 26% higher incidence *
- ▣ Present to ED within 1 week prior to attempt
- ▣ Often present with musculoskeletal complaints

Lymphadenopathy

- ▣ Lymphoma
- ▣ Rheumatoid Arthritis
- ▣ Other inflammatory diseases
- ▣ Infection
- ▣ Allergy
- ▣ Night sweats
- ▣ Fever
- ▣ Weight loss
- ▣ Hepatomegaly
- ▣ Splenomegaly

Shortness of Breath

Pulmonary Hypertension

- ▣ Group 1 PAH - Primary****
- ▣ Group 2 PH - left heart disease
- ▣ Group 3 PH - Hypoxic
- ▣ Group 4 PH - thromboembolic
- ▣ Group 5 PH - Sarcoid, metabolic disease, hematologic diseases

Interstitial lung disease and Pneumonitis

- ▣ May masquerade as pneumonia
- ▣ Will not respond to antibiotics
- ▣ Classification and admission for pneumonia may delay diagnosis, delay treatment, and worsen prognosis

EYE pain or Vision Loss

The Rheumatologic Milieu

Amaurosis Fugax

- ▣ 24% stroke*
- ▣ 17% ocular disease*
- ▣ 14% migraine*
- ▣ Temporal arteritis
 - 20:100,000
- ▣ Tenderness over artery
- ▣ Jaw claudication
- ▣ ESR
- ▣ Symptoms of PMR
- ▣ Blindness

*Framingham cohort

[Arthritis Care Res \(Hoboken\)](#), 2015
Mar;67(3):390-5. doi: 10.1002/acr.22429.

Pregnancy

RHEUMATOID ARTHRITIS

- ▣ Increased HTN
- ▣ Intrauterine growth restriction
- ▣ Premature rupture of membranes
- ▣ Post delivery flair

SLE

- ▣ Pre eclampsia
- ▣ Miscarriage
- ▣ PAH
- ▣ Pre term birth
- ▣ Low birth weight
- ▣ Maternal disease flair
- ▣ Neonatal lupus (anti Ro)

The Acute Joint

- ▣ Hot
- ▣ Red
- ▣ Swollen
- ▣ Guarding



The Acute Joint

- ▣ Gout
- ▣ Infectious
- ▣ Pseudogout
- ▣ Other crystal disease
- ▣ Lyme disease
- ▣ Reactive arthritis
- ▣ Trauma
- ▣ Spontaneous hemarthrosis
- ▣ Inflammatory arthritis

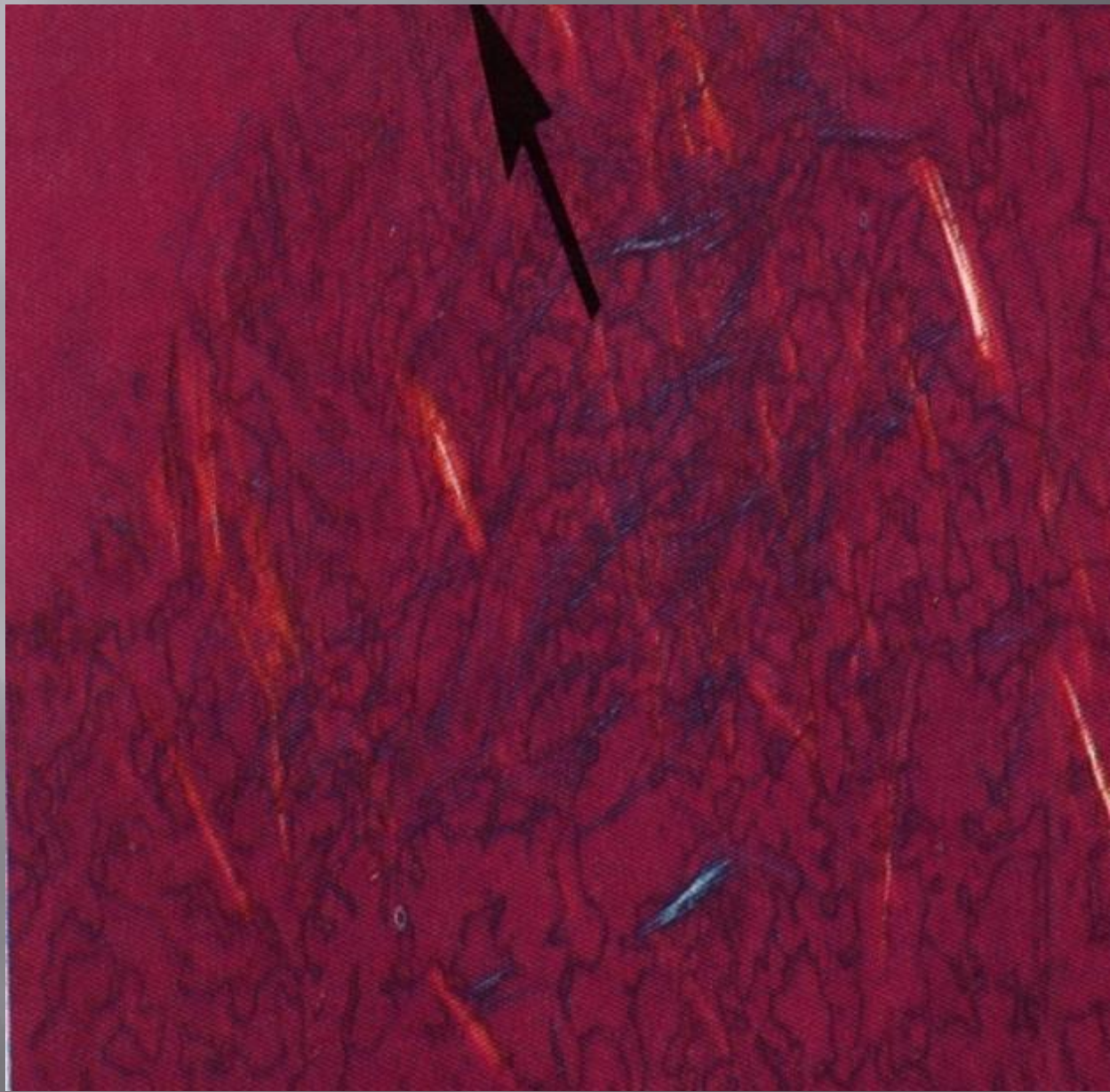
The Acute Joint for the Non Rheumatologist

- ▣ Criteria

<https://www.rheumatology.org/Portals/0/Files/Gout-Classification-Criteria-Slides.pdf>

- ▣ Synovial fluid

- ▣ Treatment





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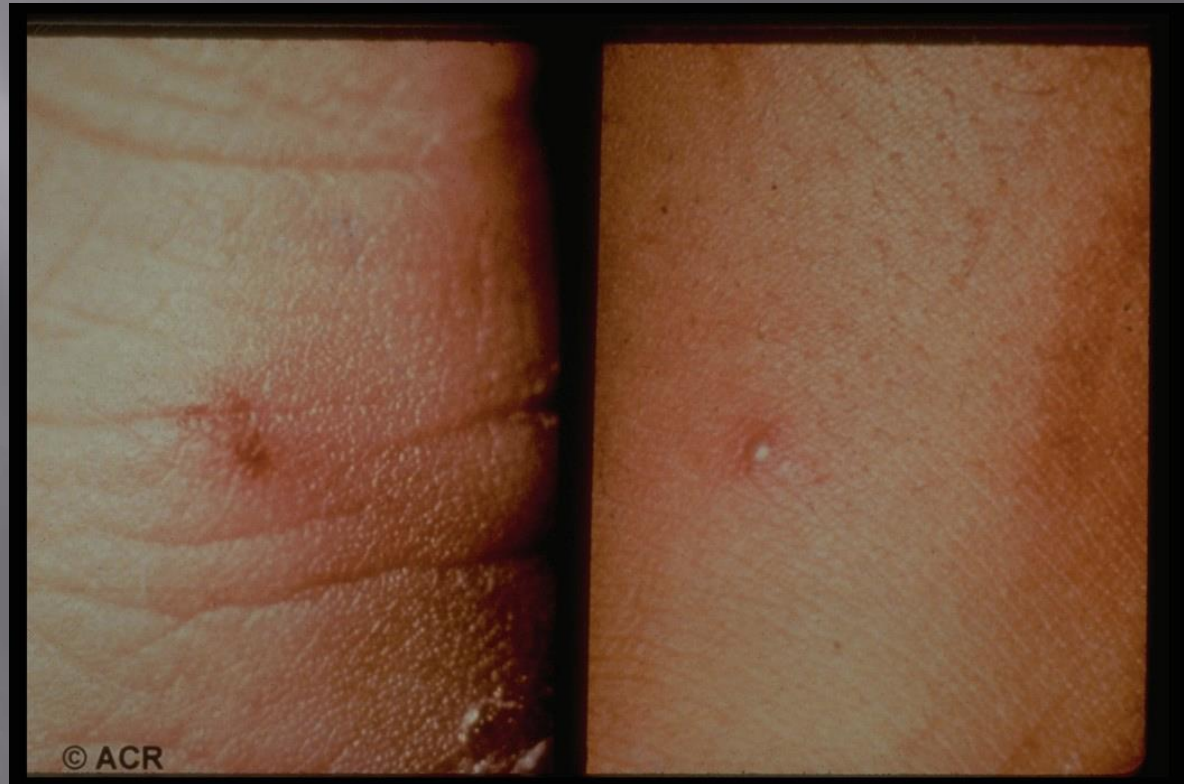
The Acute Joint

- ▣ Hot
- ▣ Red
- ▣ Swollen
- ▣ Guarding



GONOCOCCAL ARTHRITIS

- ▣ Migratory Polyarthralgia
- ▣ Tenosynovitis
- ▣ Bursitis
- ▣ Arthritis
- ▣ Fever
- ▣ Dermatitis



GONOCOCCAL ARTHRITIS

- ▣ Synovial fluid cultures usually negative
- ▣ Urethral/vaginal cultures often positive
- ▣ PCR (polymerase chain reaction test improves accuracy)
- ▣ Treatment - based on local sensitivity
 - Penicillin
 - Penicillinase resistant penicillin
 - ceftriaxone – **DOC**
 - Azithromycin 1g PO x 1 dose
- ▣ Outcome - rapid response to treatment 24-48h

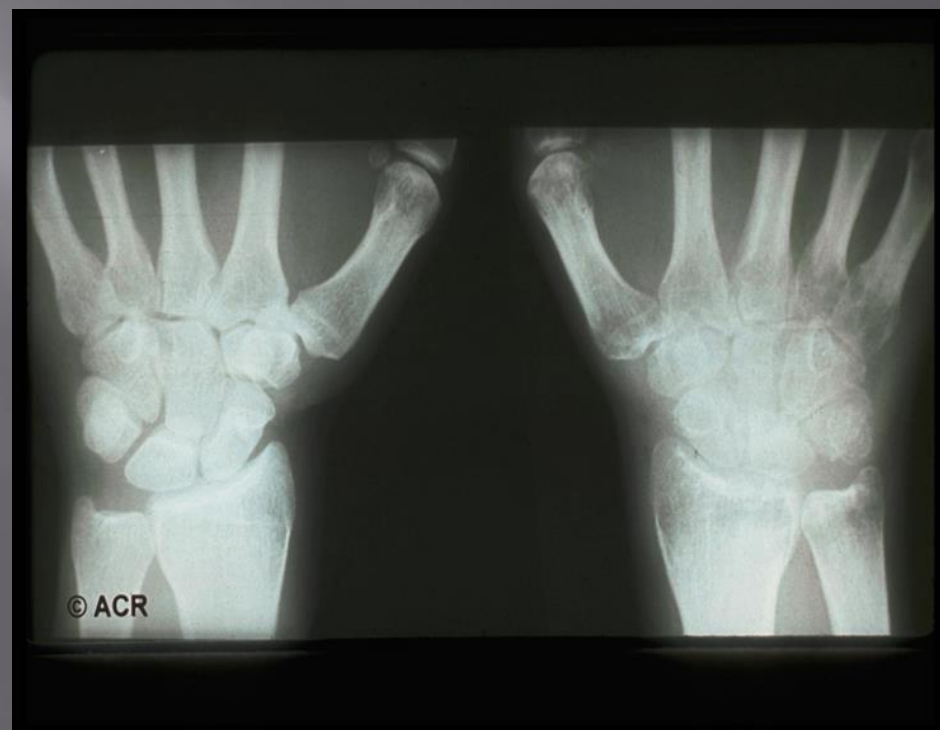
SEPTIC ARTHRITIS

- ▣ Knee 40-50%
- ▣ Hip 15 -20%
- ▣ Shoulder 10%
- ▣ Wrist 5-8%
- ▣ Ankle 6-8%
- ▣ Elbow 3-7%
- ▣ Hand/Foot 5%
- ▣ Polyarticular 10-20%

SEPTIC ARTHRITIS

- ▣ Outcome
 - 5 - 15% mortality
 - 25 - 60% joint damage
 - 22 - 70% full recovery
- ▣ Polyarticular Mortality
 - overall 23%
 - in RA 56%
- ▣ Good Prognosis
 - Knees 80% - good outcome
 - early treatment - (less than 1 week duration) - 66%
- ▣ Poor Prognosis
 - delayed treatment (over 2 weeks) - 22%
 - polyarticular disease

SEPTIC ARTHRITIS



SEPTIC ARTHRITIS

- ▣ I.V. Antibiotic Based on Patient Type and Local Sensitivities
- ▣ First Episode 2-6 Weeks
- ▣ Relapse 6 Weeks I.V. Minimum
- ▣ Arthrocentesis
- ▣ Tidal Lavage
- ▣ Arthroscopic Surgery
- ▣ Resection Arthroplasty and Reimplantation

Points To Remember

- ▣ Rheumatologic patients still have the same problems as everyone else
- ▣ Always consider
- ▣ Don't rely on lab
- ▣ Limit NSAID
- ▣ When in doubt
- ▣ Ask the magic question and use common sense
- ▣ Infection, lymphoma, thrombosis, ILD, PAH
- ▣ Synovial fluid, biopsy