

Aches and Pains in Rheumatology: Is it Fibromyalgia, Osteoarthritis, or Rheumatoid Disease?

*SCOTT T ANDERSON, MD, PHD, FACR, CCHP-P
CLINICAL PROFESSOR*

Menu(rotating)

DIVISION OF RHEUMATOLOGY, ALLERGY, AND CLINICAL IMMUNOLOGY
DEPARTMENT OF MEDICINE
UNIVERSITY OF CALIFORNIA AT DAVIS SCHOOL OF MEDICINE

Practicing in Correctional Settings Informed my clinical experiences...



Orthopedists and Rheumatologist May Encounter the Same Diagnoses

- ▶ Soft Tissue Over-use syndromes (tendinitis, bursitis)
- ▶ Low Back Pain.
- ▶ Fibromyalgia.
- ▶ Rheumatoid Disease
- ▶ Systemic Lupus Erythematosus.
- ▶ Raynaud's Phenomenon.
- ▶ Osteoarthritis.
- ▶ Psoriatic Arthritis
- ▶ Polymyalgia Rheumatica

Ruptured Long-Head of Biceps (Popeye sign)



Let's Focus on Fibromyalgia, Osteoarthritis, and Rheumatoid Arthritis

- ▶ Clinical Features?
- ▶ Differential Diagnosis?
- ▶ When are these conditions industrial?
- ▶ How do we address apportionment?

Fibromyalgia Tender Points



Pros and Cons Surrounding Fibromyalgia

In Favor of Embracing Diagnosis

- ▶ Accepted diagnosis by American College of Rheumatology.
- ▶ Diagnostic guidelines in place.
- ▶ Disrupted Sleep.
- ▶ Increased Substance P in Cerebrospinal Fluid.
- ▶ Pathophysiology of Central Pain Amplification

In Favor of Skepticism

- ▶ Little in the way of objective physical, laboratory findings.
- ▶ Normal inflammatory laboratory parameters (RF, ESR, etc.)
- ▶ History of similar non-specific syndromes for centuries.
- ▶ Secondary gain issues relative to disability retirement, etc.

Regarding Fibromyalgia and Workers Comp

- ▶ One might consider the diagnosis if trigger points are present
- ▶ Causation might be considered industrial if major physical or emotional traumatic event preceded diagnosis (e.g. MVA, assault).
- ▶ I rely heavily on ACR criteria regarding roughly 11 of 18 trigger points being positive.
- ▶ Useful to exclude underlying causes of “secondary” fibromyalgia, including rheumatoid disease, lupus erythematosus, depression.
- ▶ Consultation with other specialists might be appropriate.
- ▶ Laboratory evaluation to exclude anemia, thyroid disease.

Trauma Can Lead to Osteoarthritis, at work, while participating in sports, or for other reasons (Boxers by Damu)



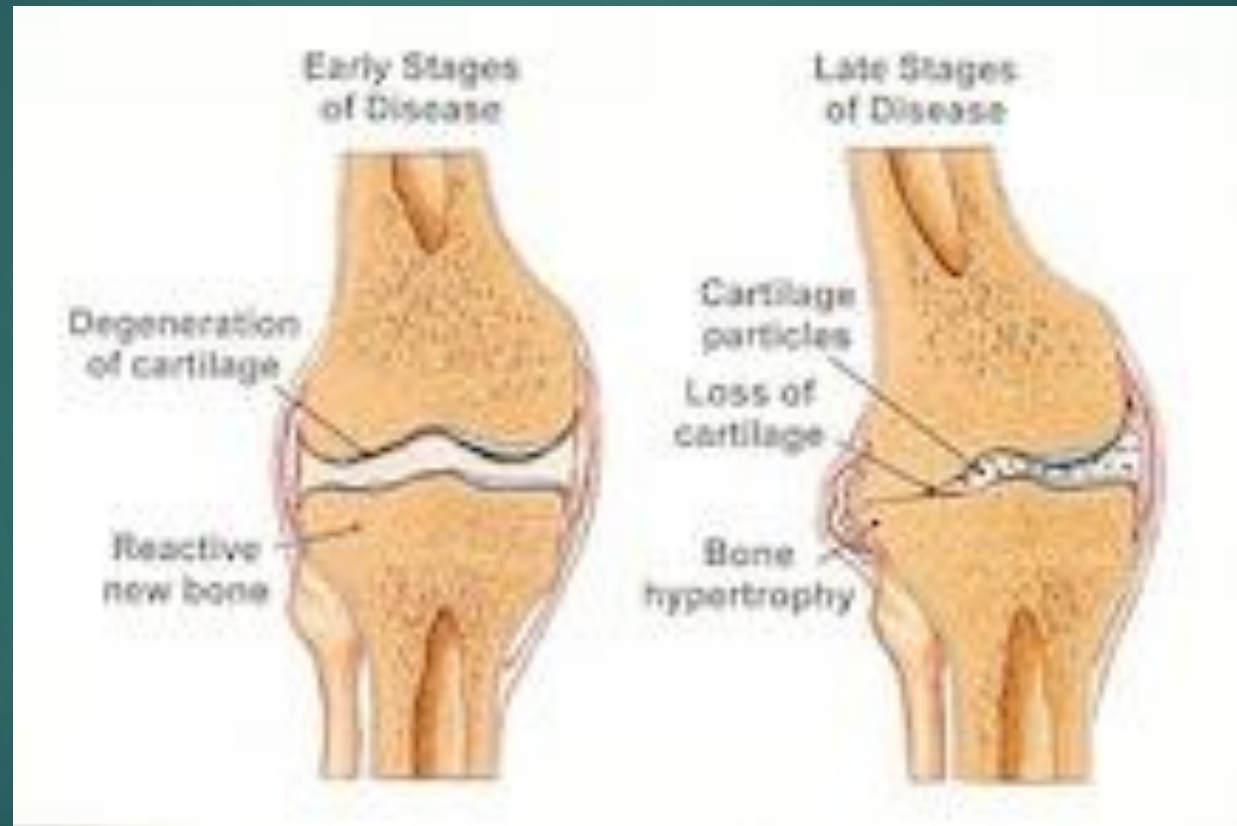
Asymmetry of OA due to Trauma (fights)



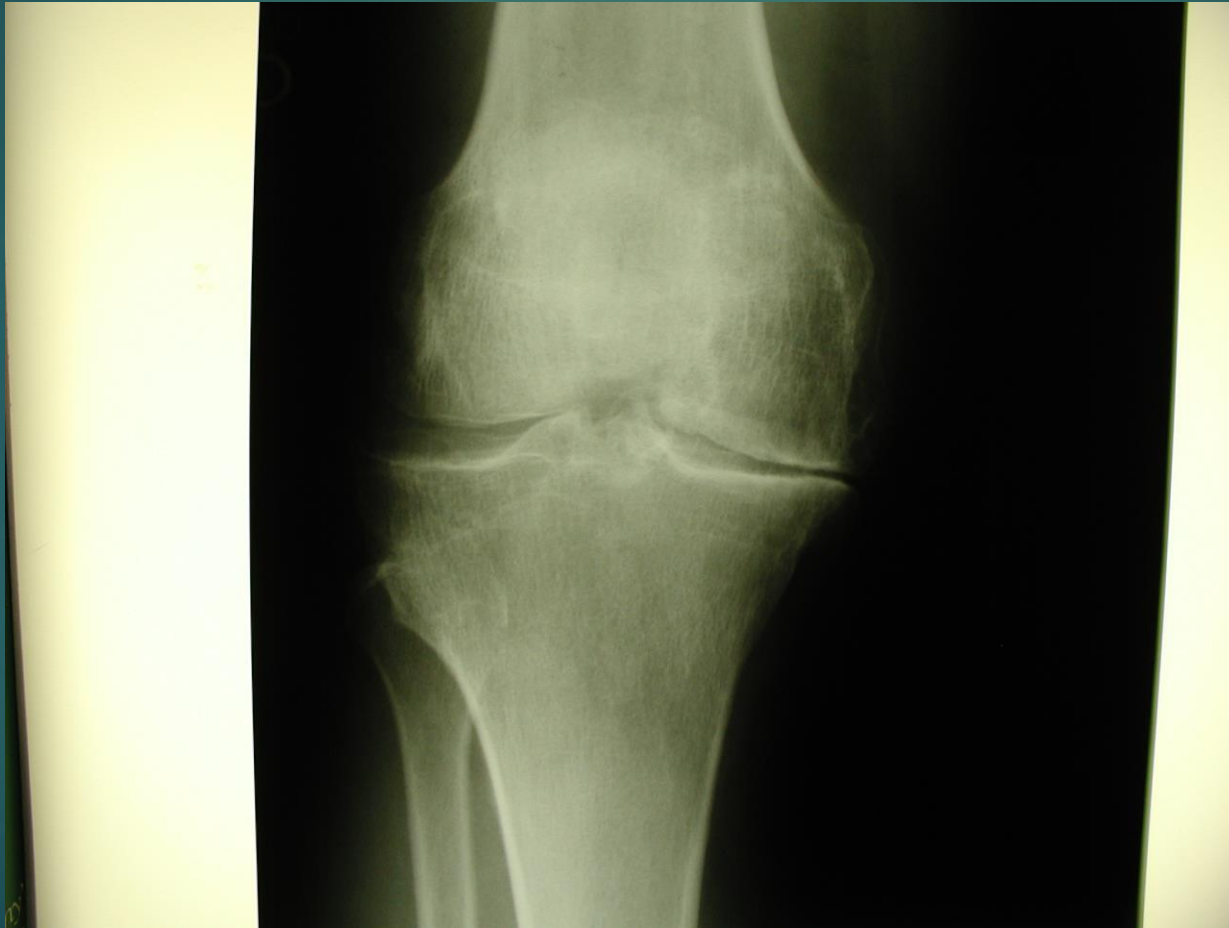
Osteoarthritis



Osteoarthritis



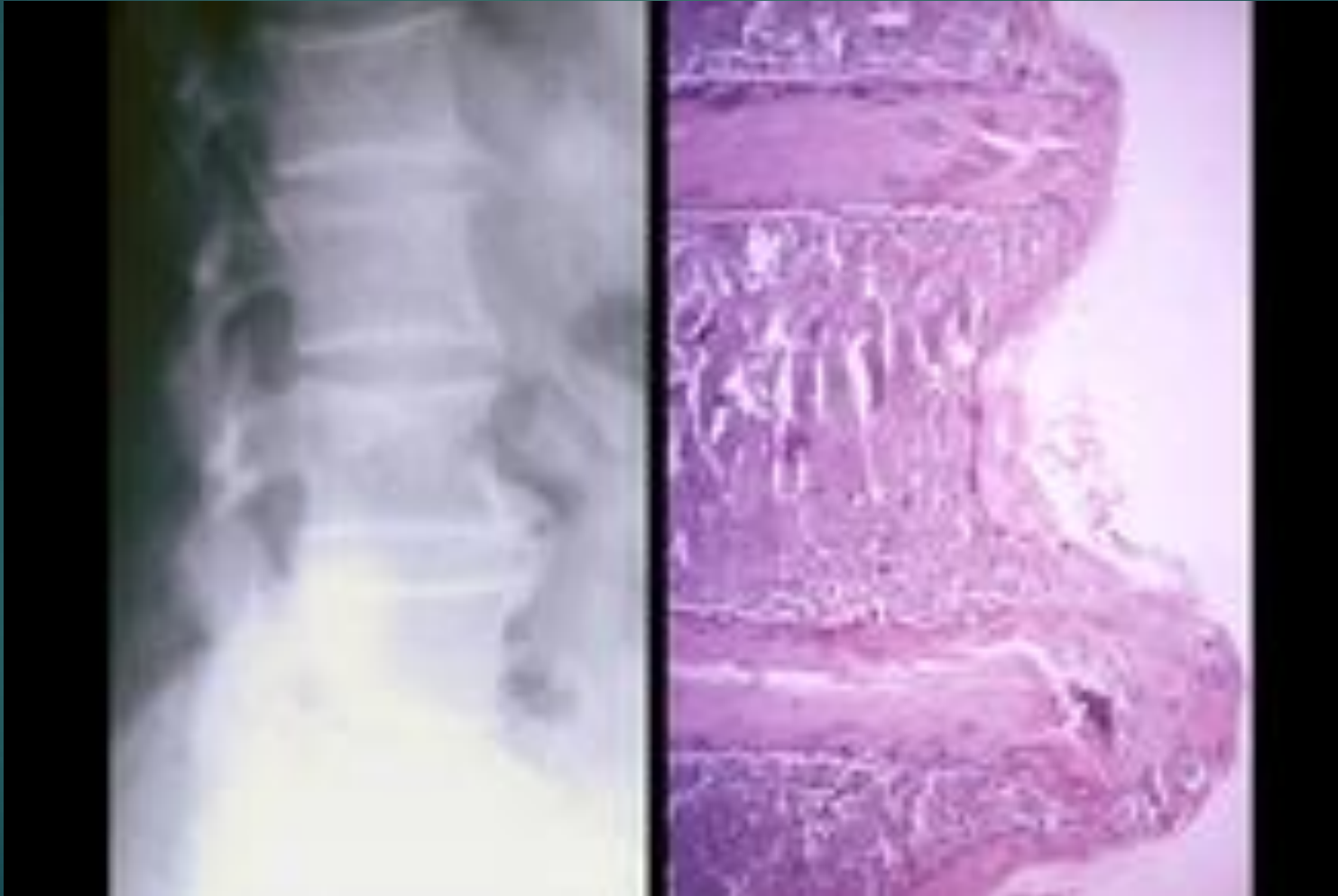
Assessing Joint Space in OA May Require Weight-Bearing Films



OA of Knees with severe valgus deformities

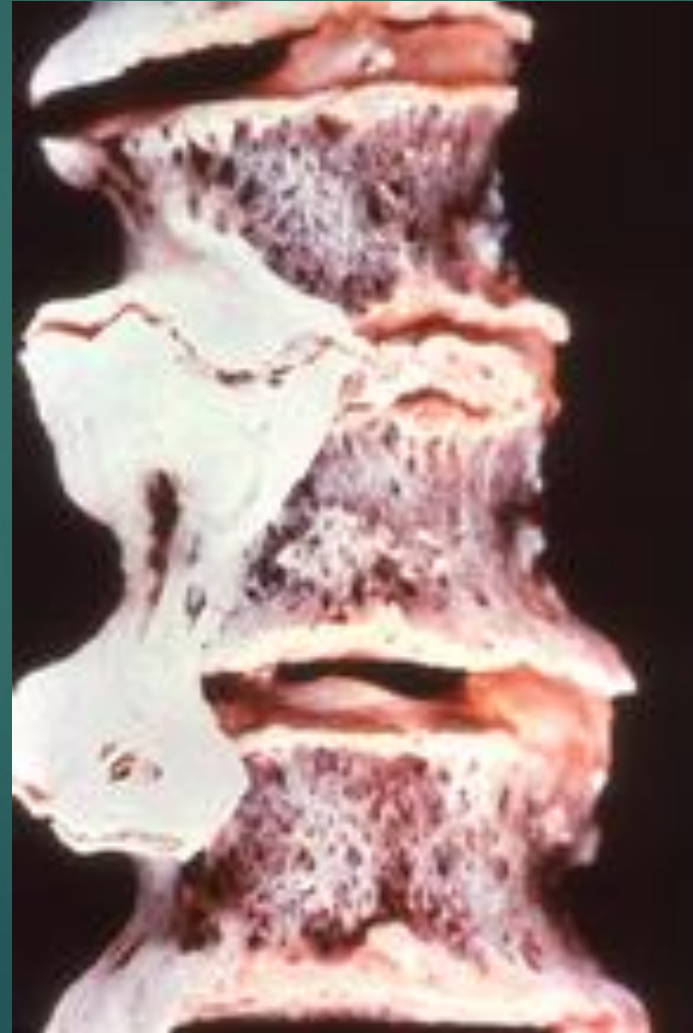


OA of Lumbar Spine With Anterior Osteophytes



Atypical Variants of OA...formerly called Forrester's Disease.

Diagnosis?

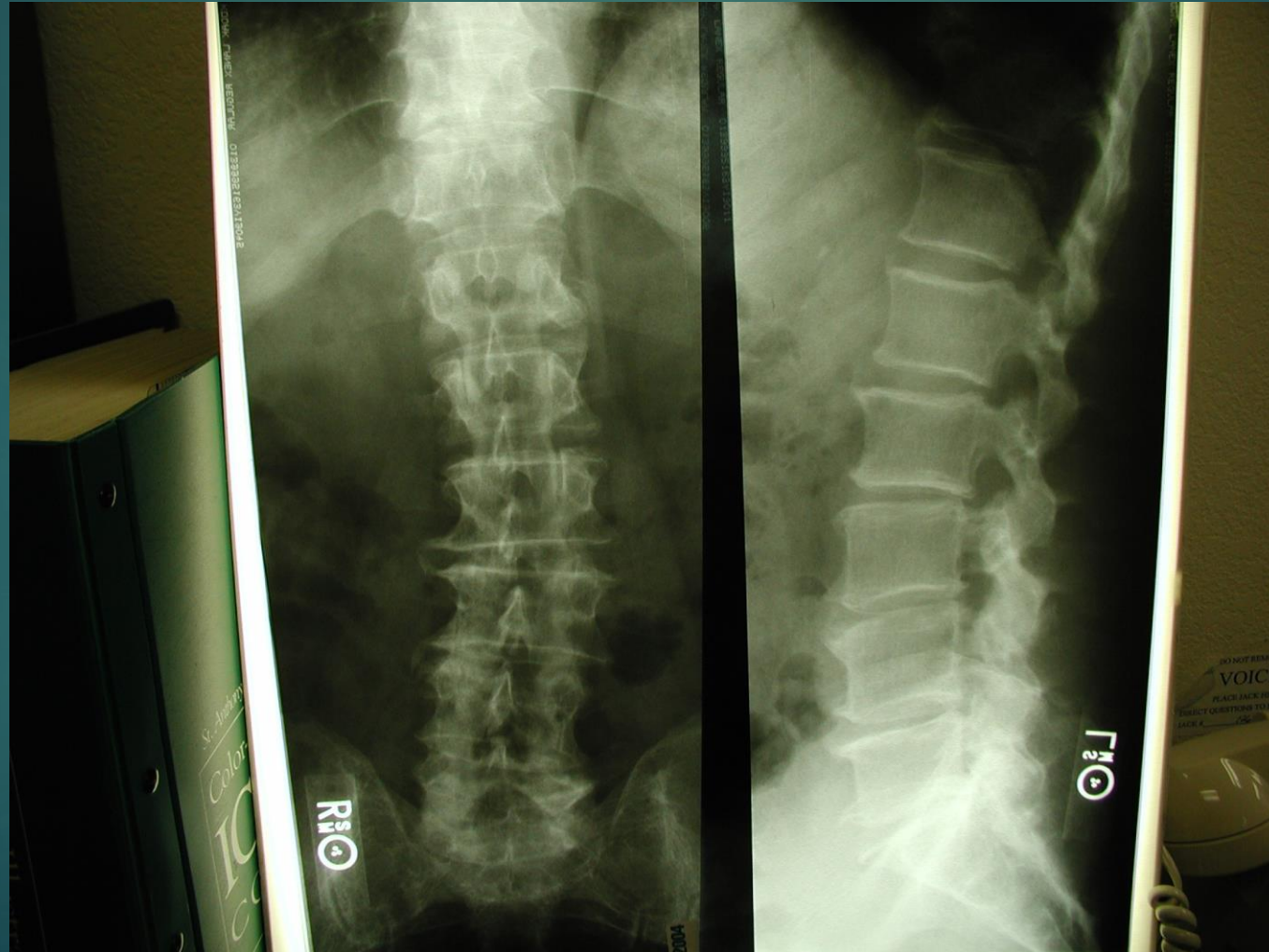


Radiograph of Diffuse Idiopathic Skeletal Hyperostosis with flowing calcifications (and

group art project describing prison at night).



Lumbarized S-1 Raises Question of Congenital Malformations in OA



Orthopedic Surgery Versus Medical Treatment

- Orthopedic interventions have revolutionized care of patients with hip arthritis.
- Alternatives include physical therapy, assistive devices, medications, dietary intervention.
- Medical interventions are not without side effects (renal insufficiency, peptic ulcer disease, liver disease).

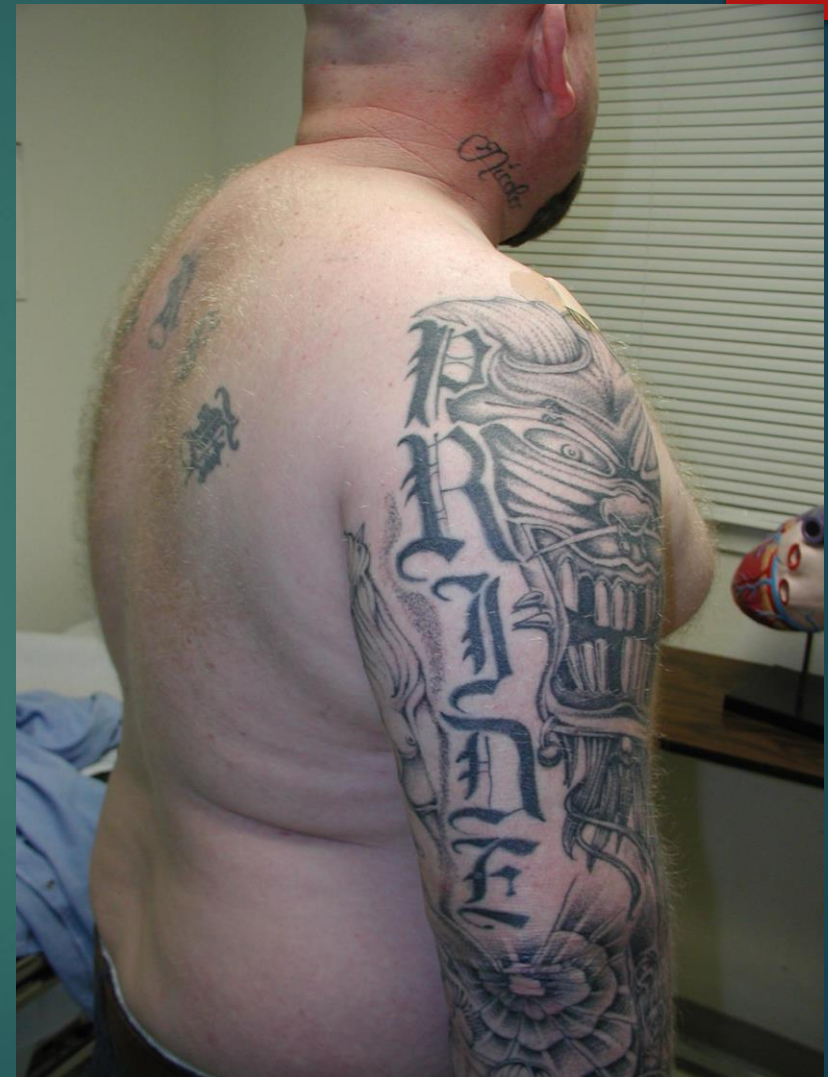


Rheumatoid Arthritis

- ▶ Afflicts about one percent of the population.
- ▶ More prevalent in women.
- ▶ Symmetric process.
- ▶ Can involve internal organs (lungs, vasculitis, etc.).
- ▶ Diagnosis by history and physical
- ▶ Laboratory studies include rheumatoid factor (RF), anti-cyclic citrullinated peptide (anti-CCP), and inflammatory markers (sedimentation rate).
- ▶ False positive RF often is due to hepatitis C.

Hepatitis C can be transmitted by needles used for tattoo placement....Typically monochromatic in Prison, and often derived from unusual sources, such as melted chess pieces.

Chess Piece, lighter, chimney for collection of soot for tattoos...



Rheumatoid Arthritis in a Correctional Setting



Rheumatoid Disease with Silicone Synovitis

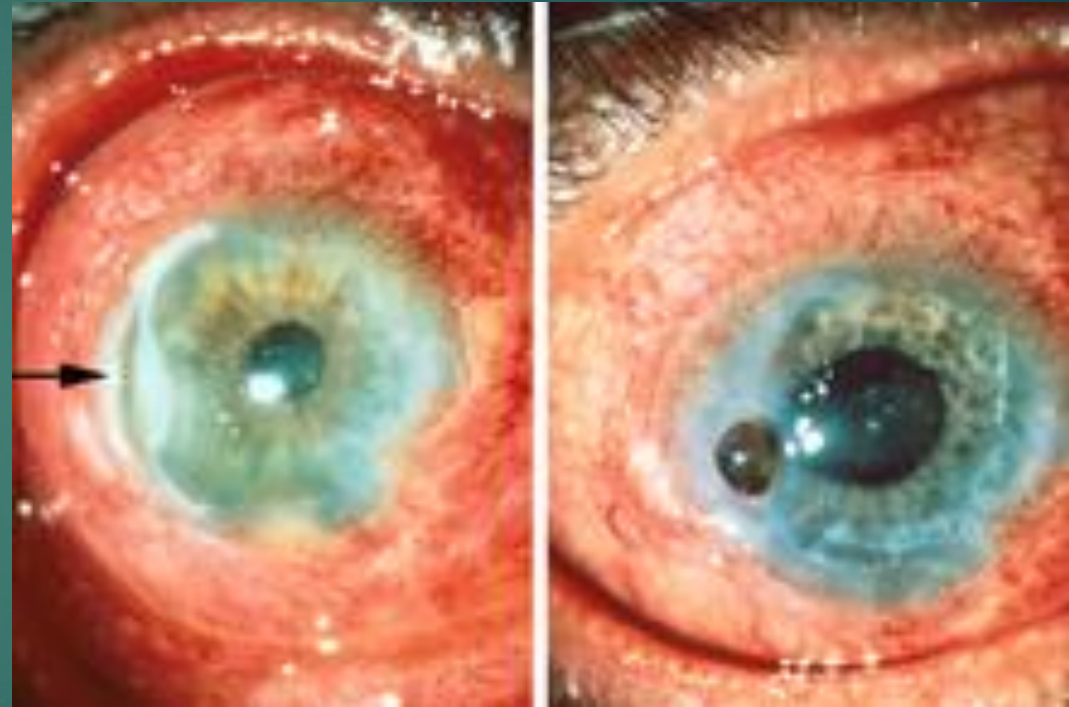


“Opera Glass Hand,” due to advanced RA



Rheumatoid Disease With Ocular Manifestations

- Scleritis may occur
- Corneal involvement is possible.
- Reminds us of systemic manifestations of rheumatoid disease.



Rheumatoid Interstitial Lung Disease



Fictional Clinical Vignette Number One: Aches, lack of energy, poor sleep, in 50 year- old woman

Evaluation

- ▶ Job involves typing, attending meetings, working as a mid-level clerk, repetitive hand motions.
- ▶ No lifting greater than 20 lbs.
- ▶ Complaint is “flare of the fibro” brought on by bad work review.
- ▶ Examination: 12 of 18 positive trigger points.
- ▶ No synovial inflammation, and no indication of tendinitis, or nodules.
- ▶ Labs include negative RF, negative anti-CCP, normal ESR.

Opinions

- ▶ Fibromyalgia.
- ▶ Reasonable to verify absence of thyroid disease, anemia, etc.
- ▶ Difficult to rate by existing tables in AMA 5th Edition Guidelines.
- ▶ Unlikely to be industrial without mechanism of injury.
- ▶ Apportionment, if applicable, likely to be to non-industrial factors, as work would be unlikely to account for this constellation of symptoms.

Fictional Clinical Vignette Number two: Symmetric OA of hands in 60 year-old male factory worker.

Evaluation

- ▶ Work involves heavy power gripping throughout the day.
- ▶ Physical examination reveals Heberden's and Bouchard's nodes.
- ▶ "Step-off" deformities of first carpo-metacarpal joints.
- ▶ Decreased hand grip strength.
- ▶ Worked at this job for 10 years, similar jobs in past at multiple locations, onset of symptoms five years ago.

Opinions

- ▶ Osteoarthritis of hands.
- ▶ Causation industrial.
- ▶ May apportion partly to previous employment or progression of underlying pathology in some cases.
- ▶ Given duration of employment, might estimate 1.5 to 1.0 ratio of industrial causation, or 60 percent industrial
- ▶ May rate by various tables in AMA guidelines, including grip strength, or ROM of more severely involved joints.
- ▶ No laboratory studies needed.

40 year-old woman with symmetric sero-positive RA on biologic agents

Evaluation

- ▶ Was in serious MVA three years ago on way between two business meetings.
- ▶ Developed myalgias, then RA.
- ▶ Previously in excellent health.
- ▶ Family History of RA.
- ▶ Positive genetic marker for RA.
- ▶ Some mild joint symptoms may have antedated injury.
- ▶ Exam reveals hand synovitis

Opinions

- ▶ Seropositive rheumatoid arthritis.
- ▶ Causation industrial.
- ▶ May have had previous forme fruste of RA or genetic predisposition that was lit-up by accident.
- ▶ Might rate by grip strength, or ROM method for hands and wrists.
- ▶ Apportionment likely appropriate.
- ▶ As rough estimate, industrial factors outweigh progression of underlying pathology by 4 to 1, so 80 percent apportionable to work.

Rheumatology: Closing thought to my orthopedist colleagues...

- ▶ Although we see less trauma and more chronic disease, we do tend to see the same cases as orthopedists, from time to time, at least.
- ▶ Fibromyalgia, Osteoarthritis, and Rheumatoid Arthritis are examples.
- ▶ History, physical examination, diagnostic imaging are important.
- ▶ Judicious use of labs may prove useful in making a diagnosis.
- ▶ Referral to other specialists may be necessary.
- ▶ Causation and apportionment vary, depending on judgment.
- ▶ I try to approach apportionment in a logical manner, but scientific establishment of causation percentages still eludes me!
- ▶ I tend to never apportion beyond ten percent intervals, as anything more specific strikes me as being speculative.

Thank you!

(Gang Life, by Damu)

