Approach to Arthritis

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Systematic Approach

- Do not jump to a diagnosis
- SCRIPT strategy - step by step deduction and analysis
- Build a case
- Come to a logical set of differentials
- Assert with confidence: This is the most likely diagnosis
Radiograph of both hands likely from a rheumatology referral

- **Step 1: Symmetry** Symmetrical or Asymmetrical
- **Step 2: Number of Joints involved** Mono – or - Poly - articular
- **Step 3: Bone density** Preserved or Reduced

**Juxta-articular osteopenia**

- Present: RA/SN Arthritis
- Absent / Preserved: OAor Crystal deposition
Script: Step 4 - Erosions

Mono – or - Poly - articular involvement

Talk in GROUPS and not individual joints

Involving and Sparing of groups

Select the best representative abnormality and describe

- 1. Central
- 2. Juxta-articular
- 3. Marginal
Step 5: look for associated features

- Subluxations
- Soft tissue swelling
- Joint deformities
- Proliferative reactive changes (enthesopathy in SNarthritis)
- Soft tissue calcifications & Periosteal changes
- R/V areas: Mets, Infection, Trauma and Hyper PTH
- Hyper PTH: Primary vs Secondary vs Tertiary
Step 6: Typical features

- Psoriasis: pencil cup deformity, fluffy periostitis, tuft resorption
- Gout: juxta-articular erosions and tophi
- Prim OA: seagull deformity
- Sarcoid hand: lacy trabecular pattern and granulomas
- Soft tissue calcification: CPPD, Scleroderma
- Haemochromatosis (iHC typically involves 2nd and 3rd MT)
Summary

- Symmetrical / Asymmetrical

- Mono / Poly articular involvement

- Osteopenia

- Erosions – group and characterise

- Characteristic findings – OA, RA, PA, Gout, Metabolic
Key Tips

- Key differentiator OA vs RA/IA: juxta-articular osteopenia
- Have a SCRIPT for each of these and match patterns
  - OA
  - RA
  - SNA
  - Gout
  - Metabolic
  - Others
Let the fun begin 😊

- I am a believer in Socratic teaching method

- I have told you how to approach the cases, now it's your turn to apply the principles and get to the answers

- Am sure you will, if you stick to the SCRIPT

- Practice makes man perfect !!!
XR Hand Both:

Bilateral symmetrical erosive polyarthritis affecting predominantly the MCP joints of both hands. Most marked erosion at the right hand ring finger MCP joint. Subluxation at little finger MCP joint noted. There is periarticular osteopenia. Appearances are in keeping with rheumatoid arthritis.
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Thank You

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