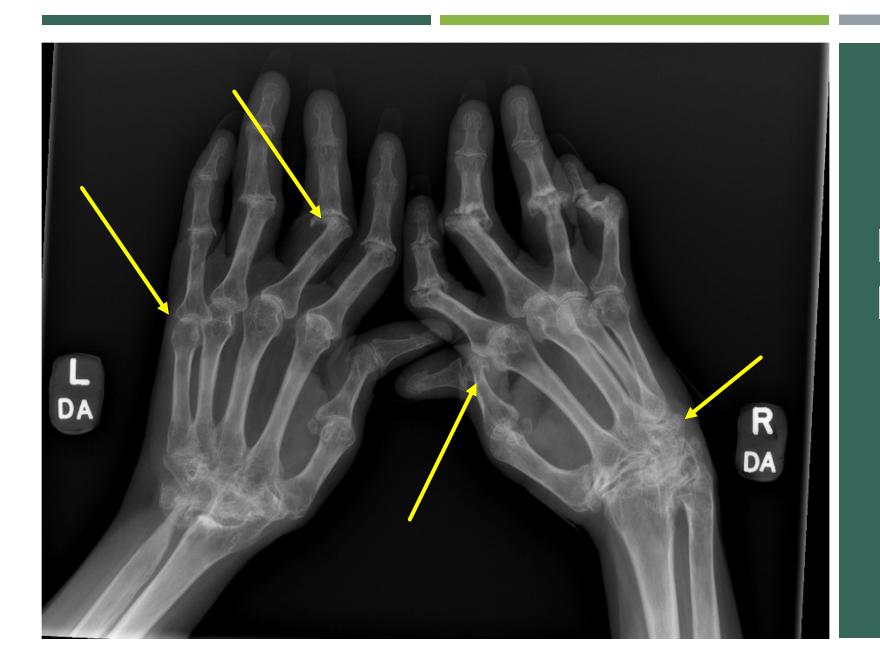
RADIOLOGY ROTATION PRESENTATION – JUNE 2019 JENNIFER HANBERG,YSM 2020

## A PATIENT WITH LONGSTANDING RHEUMATOID ARTHRITIS

### BRIEF HISTORY

- 60 year old lady with seropositive RA for 30+ years, presenting to rheumatology office for follow-up
- Wheelchair bound due to knee contractures
- History of severe erosive deformity of the hands – unable to make a full fist
- Currently maintained on methotrexate weekly



### RADIOLOGIC FINDINGS

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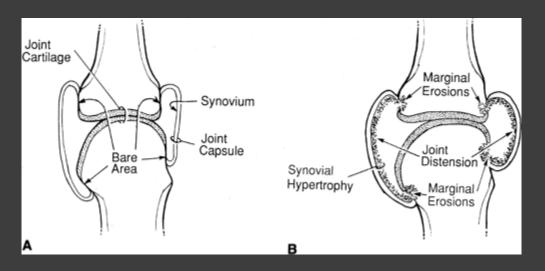
# EROSIVE RHEUMATOID ARTHRITIS:

#### **CLINICAL PEARLS**

- Risk is reduced with DMARD therapy, but not eliminated
- Typically requires years to present, and is not reversible; joint replacement may be of use in select cases
- Foot involvement is common (at least 1/3 of patients) and may precede hand involvement
- Ddx of erosive joint involvement
  - RA/JIA
  - Seronegative spondyloarthropathies (usually asymmetric)
  - Erosive OA

# EROSIVE RHEUMATOID ARTHRITIS:

#### RADIOLOGIC PEARLS



- Radiographic features:
  - ABCDES
- Inflammatory vs non-inflammatory joint arthritis:
  - Inflammatory = uniform cartilage loss, erosions, periarticular osteoporosis, ankylosis
  - Non-inflammatory = non-uniform cartilage loss, sclerosis/osteophytes, cysts
  - Gout-like = late cartilage involvement, no osteoporosis, and erosion/cysts
- Progression:
  - Joint space narrowing, juxta-articular osteopenia
  - Marginal erosions
    - "Bare area"
  - Destruction of joints, subluxation
  - Superimposed degenerative changes in longstanding cases
- Ankylosis of small joints and of talonavicular has been reported with frequencies varying from 0.8-10%

#### REFERENCES

- West, Rheumatology Secrets 3<sup>rd</sup> ed.
- Resnick, Diagnosis of Bone and Joint Disorders 4<sup>th</sup> ed.
- Matsumoto et al, Lateral collapse of the tarsal navicular in patients with rheumatoid arthritis: Implications for pes planovarus deformity. Mod Rheum 2018.
- Heinlen and Humphrey, Skeletal complications of rheumatoid arthritis. Osteoporosis Int 2017.