06/24/21 Morning Report with @CPSolvers

***Case Presenter**: Simone Vais (@SimoneVais) **Case Discussants**: Rafael Medina (@rafameed)*

CC: 45 yo F presenting w/ 6 days of left wrist pain and erythema

HPI:
Pain and swelling of the L wrist that worsened during the days. A CT showed no fractures and was treated w/ tylenol. During the course of the disease the erythema and pain worsened and developed numbness and tingling of her fingers. She has no gout PMH.

PMH:
Hyperthyroidism, anxiety, depression

Meds:
Methimazole, Chlorothiazide

Fam Hx:
Primary caretaker of her grandmother

Soc Hx:
None

Health-Related Behaviors:
None

Allergies:
None

Vitals: **T**: **98.8** **HR**: **BP**: **RR**:16 **SpO_2**: 98%
Exam:
HEENT: unremarkable
CV: unremarkable
Pulm: lungs field clear to auscultation
Abd: unremarkable
Neuro: unremarkable
Extremities/Skin:
Appearance: LUE warm, red and swollen extending from her distal fingertips proximally in a streak like pattern up to her elbow. Pain: L arm diffusely tender to palpation w/ active and passive ROM. Motor: able to actively move all digits, unable to actively move wrist. Sensation decreased on palmar aspect of all her fingertips. Vascular refill < 2 seconds. RUE wnl.

Notable Labs & Imaging:
Hematology:
WBC: 8.2 Hgb: 13.7 Plt: 265
Chemistry:
Na: 140 K:4 Cl:106 Cr: 0.54 HCO3: 27
CRP 50 CK 299 (nl) Uric acid: 4 (nl) RF: 3.7
Patient was started w/ empiric antibiotics
Imaging:
Hand X-ray: No evidence of fractures. Joint spaces normal. No evidence of calcification and swelling. Same read as the past X-ray.
CT 2 days ago: dystrophic calcified mass 12x8x7 mm related to the pisiform triquetral joint space. No inflammatory changes in adjacent soft tissues, no fractures of the L wrist, and subcutaneous stranding along the distal ulna.
CT on admission: Previous identified dystrophic lesion in the pisiform triquetral joint space is no longer visualized, mild hand soft tissue swelling w/ skin thickening and subcutaneous edema (probably of cellulitis)
MRI: Nonspecific edema and enhancement involving the ulnar aspect of the pisiform triquetral joint space and surrounding soft tissue. Mild indistinctness of the palmar scapholunate ligament suggestive of injury. Isolated focal edema in the median nerve at the level of the carpal tunnel
Final dx: **Acute calcific periarthritis.**

Problem Representation: 45 yo F with recent onset of pain and swelling of left wrist with diffuse tenderness on examination and non-specific labs and imaging studies

Teaching Points (Kirtan):

- **Wrist pain and erythema**- Trauma, Hypothyroidism, Amyloidosis, Pregnancy, Acromegaly. Extremities are the reflection of systemic diseases. *Localization*- Skin, Vessel (Artery vs Vein vs Lymphatics), Bones/Joints, Neuromuscular issue. Must not miss- ***Septic arthritis & Compartment syndrome (absence of pulses)***

- **Physical examination findings-** Edema + Erythema + Diffuse tenderness to palpation with ROM/ pain out of proportion = *Decreased tissue perfusion due to raised Compartment pressure (Compartment syndrome)*
Etiologies- Fracture, loss of Vessel wall integrity (Aneurysms or Coagulopathy), ***Necrotizing deep space infections***

Exploring Lab findings- Elevated CRP points to inflammation. So still consult surgery. Paucity of abnormal lab reports may hint to possibility of ***pseudogout (+/-Chondrocalcinosis).*** Tapping the synovial fluid is controversial in presence of possibility of infections.

Integrating Imaging studies- Nonspecific findings also warrants consideration for rare entities like ***CRPS .***
Acute calcific periarthritis to be considered when vague calcifications are present. Usually benign and responds well to conservative management. Mimics Gout and Pseudogout.