2/11/22 Morning Report with @CPSolvers

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CC: Right sided weakness

HPI: 20 something young woman triaged to the ED p/w R hemiparesis. 2 days prior noticed while she was lying in bed the R side of her body, her forearm, was not moving. As well as paresthesias. The next day her weakness was better, but had pain in her elbow, knee and wrist. Had difficulty picking up things. 3 days after the onset of symptoms noticed spotting in her skin.

Denied fever, diaphoresis, weight loss, exposures.

PMH: Mild intermittent asthma

Meds: None

Fam Hx: Non revealing

Soc Hx: Works around children in an urban area.

Health-Related Behaviors: 1 sexual partner w/o protection.

Allergies: none

Vitals: Normal.

Exam:

Gen: Well appearing.

HEENT, CV, Pulm: normal.

Abd: No organomegaly

Neuro: Strength below the elbow and below the knee was diminished. DTR were normal. Hypoesthesia in the first 3 fingers of her R hand.

Extremities/Skin: Pain in the elbow, knee and wrist to palpation w/o significant edema. Small erythematous pustule in her R wrist and chin, and very painful erythematous patch in her R wrist.

Notable Labs & Imaging:

Hematology:

WBC: 14 000 77% neutrophils Hgb & Plt: Normal

Chemistry:

Na: K: Cl: CO2: BUN: Cr: glucose: Ca: Phos: Mag:

AST: ALT: Alk-P: T. Bili: Albumin:

CRP 127 mg/L

Urine and blood cultures were neg.

UA: Pyuria

HIV neg.

Cervical and pharyngeal swabs for Gonorrhea: positive.

Final Dx: Disseminated gonococcal infection.

Problem Representation: 20-ish F p/w 3 day history of R-sided pain in her elbow, knee and wrist. Exam revealed hypoesthesia in the first 3 fingers R hand, pustules and tenosynovitis in her R wrist

Teaching Points (Samy):

- When approaching a vague neurologic complaint consider muskuloskeletal (e.g. pain due to tenosynovitis) and metabolic disorders (e.g. hypokalemia). Asthenia vs. true neurologic deficit
- Clinical reasoning: S1 thinking (fast) vs. S2 thinking (slow and more systematic), most clinical reasoning is a mix of both
- Arthritis and dermatitis in a young individual-> think disseminated gonococcal infection, but also infective endocarditis, rat bite fever, endemic fungi, etc.
- Neurologic complaints in muskuloskeletal disease: nerve compression due to muscle or joint swelling (e.g. carpal tunnel or myositis)
- Oligoarthritis -> think infectious, crystalline or autoimmune (SpA, eg. aSpA, ReA, Psoriasis-Arthritis, enteropathic Spa)
- Infectious causes of disseminated rash: mononucleosis syndromes, syphilis, disseminated gonococcosis, rat-bite fever, toxic shock syndromes, typhoid fever, infective endocarditis, etc..
- Workup of septic arthritis: blood cultures, mucosal swabs for STDs and joint tap
- STDs travel together, consider checking in panels (HIV, Syphilis, Chlamydia, Gonorrhea,etc.)
- N. gonorrhea has the capability of evading the immune system (terminal complex of the complement system), low diagnostic value of joint aspirates (only ⅓ positive for pathogens)
- Pyuria in the absence of pos. culture/bakteriuria (sterile pyuria) -> non-infectious inflammation (Sarcoid, drug-induced) or culture-neg. organisms (e.g. gonorrhea, chlamydia, TB,...)