07/14/22 Morning Report with @CPSolvers

***Case Presenter**: Rafael Medina (@rafameed) **Case Discussants**: Kiara Camacho (@kiaracamacho96 and Rabih (@rabihmgeha*

CC: skin lesion and joint pain

HPI:
53y M p/w skin lesions and joint pain
4 months earlier presented with right great toe redness, pain, and swelling
Treated empirically with ciprofloxacin with no improvement
3 months earlier developed a L knee effusion -taken to the OR for wash out - treated with vanco and clavulin
No improvement in symptoms
ROS positive for night sweats
Over the next 2m, developed multifocal skin lesions on face and extremities

PMH:

Meds:

Soc Hx:
Born and lives in southeastern USA

Health-Related Behaviors:
Supervisor of a landscaping company
Participates in Civil War reenactment
Active tobacco use, no alcohol. No recreational drugs

Vitals: unremarkable
Exam:
Painful lesions sq nodules that with erupted purulent material
Raised lesions with erythematous plaques that occasionally had ulceration

Notable Labs & Imaging:
Hematology:
WBC: 10.2 (87% neutro) Hgb: 8 Plt: 540k

CMP unremarkable
RPR non-reactive
Serum cryptococcal neg
Serum histoplasma antibody neg
Hep B and C serologies neg
ANA and ANCA neg
Normal complements
HIV neg

MRI L leg showed abnormal marrow signal in the tibia and bones of the forefoot with osteomyelitis of the left 4th toe, and multiple collections in the soft tissues read as compatible with abscess
CT chest with innumerable randomly distributed bilateral pulmonary nodules
Bronchoscopy with transbronchial biopsy, skin biopsy, and amputation of the left 4th toe - Histopathology from all 3 sites showed necrotizing granulomatous infection
AFB tissue showed no acid fast bacilli and GMS stain of the tissues showed broad-based budding yeast
Blasto and Histo urine antigen was positive

Final dx: blasto

Problem Representation: 53yoM p/w disseminated purulent skin lesions and joint pain. Found to have bilateral pulmonary nodules and multiple abscesses and blasto and histo urine antigen positive.

Teaching Points (Ariel & Seyma):
Skin lesions: Localisation, Time course, Extension, depth
Joint pain: Inflammatory Vs. Non-inflammatory
Monoarticular, Oligo- vs. polyarticular
Buckets:
- Infection (Septic arthritis → pyogenic like Staph aureus, disseminated gonococcal infection; infectious endocarditis, Lyme's, Chikunguya),
- Rheumatologic/Autoimmune (SLE, Psoriasis arthritis, Gout, Rheumatoid arthritis, ReA)

Culture neg septic arthritis:
- Most common: Tb, Lyme disease (Erythema migrans), fungal
- Bacteria/Fungi that are exogenous → Exposure: Tick, Fungal, Bacteria?

Pustules: N. gonorrhea, sporotrichosis, autoimmune (pyoderma gangeronosum: CED, RA) , TB, Behcet, SAPHO-Syndrome, Psoriasis pustulosa, Acne pustulosis

Landscaping in Southeastern USA: think of endemic mycoses (Histoplasma, Blastomycosis, Sporotrichosis) -> pulmonary imaging due to transmission route
- Establish pt immune status when considering **disseminated** fungal disease -> in immunocompetent host, **blasto** most likely → nasal skin lesions, arthritis & broad-based budding typical! (oral mucosal lesion characteristic of blasto)
- Cross-reaction between Histo & Blasto in Urine antigen test
- DNA-sequencing used for detecting; tx: Itraconazol