6/25/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter:*** **Abeer** *(@AbeerAlmusleh98)* ***Case Discussants:*** **Rabih** *(@)* & **Ramaswamy** *(@Dr_RamaswamyS)*

https://clinicalproblemsolving.com/present-a-case/

Scribing (Hafsa)

CC: 91y/o M presenting with painful skin rash on the RLE for 2 weeks

HPI: presented with 2 wks hx of progressive multifocal skin lesion involving the right second toe, foot ,ankle and knee which began after minor trauma to the right second toe from a walker. He completed a course of doxycycline and mupirocin for presumed cellulitis without clinical improvement

He reports to be on mtx and hydroxychloroquine for years without any recent dose changes, though was not taking it at time of presentation

ROS: (-) fever, night sweats, cough, chest pain, abdominal pain or urinary symptoms.

PMH:
HTN
Seropositive RA
Hyperlipidemia

Meds:
Methotrexate 15 mg weekly,
Hydroxychloroquine
Prednisone PRN (RA flares)
Folic acid supp
Lisinopril

Fam Hx: -

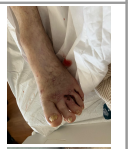
Social Hx: Lives in rural area of Southern louisiana near fresh water, spends time outdoors in his yard

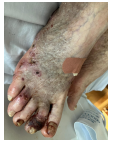
Health-Related Behaviors: -

Allergies: -

Vitals: T: afebrile **HR**: 86 **BP**: 120/76 **RR**: 16 **Sat**: **BMI**:
Exam: Gen:, A/O *Awake3. No LAD.
CV: wnl **Plum:** wnl **Abd**: wnl **Neuro**: wnl
Extremities/skin: multifocal verrucous necrotic and pustular lesion involving the right second toe, foot, ankle and knee

Notable Labs & Imaging:





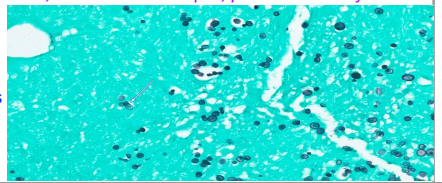
Hematology:
WBC: 12.8 (++ neutrophils) Hgb: 11.6 MCV:89 Plt: 325k
Chemistry:
Na: 136 K: 3.8 Cl: 104 Cr: 0 .98 BUN: 10 LFTs: nl Albumin: 3.8g/dL
ESR: **120** CRP: **246** ANCA-, ANA-, MPO-, c3 & c4 nl
UA Clear, blood cultures(-) urine culture (-)
Imaging:
CT angiogram RLE: No osteomyelitis or deep tissue abscess
TTE: nl CT CAP: wnl
Dermatology consult: 4mm punch biopsy, H&E stain demonstrated mild spongiotic dermatitis without vasculitis, granulomatous inflammation, or fungal elements, PAS-D, GMS and file stain (-)
Fungal antigen testing; serum blastomycosis Ag & serum Histoplasma Ag (markedly positive), urine blastomycosis Ag (-), CrAg (-)

Itraconazole was initiated empirically, continued clinical decline > repeat deep tissue biopsy

Repeat deep tissue biopsy of right metatarsal region and ant thigh; histopathologic evaluation demonstrated **broad based budding yeast forms** consistent with further dissemination of disease

Progressive symptoms with mucosal involvements, oral lesions developed, patient declined further treatment

Dx: Disseminated cutaneous blastomycosis



Problem Representation: 91y male with pmh of seropositive RA immunosuppressed on mtx,prednisone and hydroxychloroquine presenting with RLE localized multifocal verrucous necrotic and pustular lesion associated with markedly elevated inflammatory markers

Teaching Points (Lourenço)

- **Painful rash:** localization is key (generalized or localized; superficial or deep; symmetric or asymmetric). The degree of pain is important, since truly painful rashes have a limited DDx.
- **Broad DDx:** take into account the host status (e.g., immunocompromised) and the PMHx (e.g., drugs, no response to antibiotics), after crystallizing the problem (i.e., the type of rash and its extension).
- **Loss of integrity of the skin (" 2 PPs "):** usually due to low perfusion to the skin, or high pressure over the skin. If there are no signs of these, **think inflammation** (e.g., infection, autoimmune diseases, drug-induced). The erythema, distribution and contour of the lesions are worrisome for inflammation and vessel involvement, and that usually comes with internal signs of disease.
- **How to make progress**: whenever the disease seems localized, in order to make progress efficiently, tissue is the issue. When it comes to the skin, a punch biopsy is superficial, and might not catch the fingerprint of systemic diseases that go into the skin. In these cases, a deep biopsy at the edge of a lesion has more diagnostic yield. Always strive for better tissue!
- **Paradox**: there's a limited number of diseases that cause this much cutaneous disease without systemic involvement, such as some cancers (++ **T-cell lymphoma**) and autoimmune diseases (++ **pyoderma gangrenosum**). The infections that cause subacute localized skin disease are: cellulitis (the tempo doesn't match) or **granulomatous infections** (depend on the environment). The ubiquitous organisms that cause such disease are atypical mycobacteria, and some fungi (e.g., blastomycosis, sporotrichosis).
- *See cutaneous-only subacute mycosis*