11/10/23 Morning Report with @CPSolvers

***"One life, so many dreams" Case Presenter**: Kirtan (@KirtanPatolia) **Case Discussants**: Rabih (@rabihmgeha) and Reza (@DxRxEdu)*

"The Impeccable Final Destination(TIF) /Mysterious Deadly Afflictions (MDA)"
CC: 42 y/o M p/w 2 months of high grade fever and night sweats
HPI: Since last 2 months, various symptoms affecting multiple organs, chills, night sweats, nocturnal high grade fever, anorexia, neck pain, 10 pounds of weight loss, malaise, activity limiting fatigue, intermittent R-sided dull chest pain, SOB, polyarthralgia most pronounced on wrists, MCP, PIP, DIP, hands, ankles, elbows, painful ulcers dorsum on the of the hand (initially purulent w/ serosanguinous discharge). Conjunctival injections for 2 wks that started 1 month ago. Eyes are red w/ no pain, tearing or photophobia, redness lasted 1-2 weeks went away. Painful burning oral sores, numbness tingling in the hands.

PMH:
First time at the hospital, up to date w vaccination, went to 2 hospitals in 2 months, no dx.
Meds: No drugs, OTC, supplements.

Fam Hx: None.
Soc Hx: Software eng. Monogamous w/ wife. No travel. No pets. No recent sick contacts.
Health-Related Behaviors: No drugs including marijuana
Allergies: None.

Vitals: T: 38.8 continuous over the hosp. w/ Tylenol goes away, not cyclical **HR:** 120 **BP:** 124/76 **RR:** 18
Exam:
Gen: Fatigued, slumping down in his chair, previously athletic, active. Now cant even get out of bed.
HEENT: Extraocular motion intact, pupils RR to light, no erythema, no hypopyon. Oral cavity: Aphthous lesion, no discharge, bleeding, mucositis, or pharyngitis. No LAP. Alopecia.
Extremities/skin: Diffusely swollen hands (MCP, DIP, PIP, knees, ankles), markedly tender to palpation esp fingers. No restriction, erythema, crepitus. Ulcers 2 on the R-hand, 3 on the left. Scabbed now. Past image: well circumscribed, punched out, 0.5x1 cm, base w/ yellow thick dense debris. No longer painful but initially painful. Pyoderma gangrenosum type lesion. Armpit, helix, antihelix ulcerations.

Notable Labs & Imaging:
Hematology: WBC: nl Hgb: 12.3 Plt: nl, MCV: 90, Ferritin: 570
Chemistry:
AST: 69, ALT:46, LDH: 468 (these three values were consistently like this); Albumin: 3.2, T.Protein: 7.2; Hypogammaglobulinemia. ANA, ANCA, RF, anti-CCP, complements :Normal, A.M. cortisol, TSH: nl. Haptoglobin: nl, Coombs (-), CK & Aldolase: nl, myositis panel (-) when checked for the first time. Repeat CK, Aldolase: nl, ANA, ANCA, RF still negative.
UA: unremarkable
Protein: Cre: normal, ESR: 60 CRP: 3.8
The "Ellas", crypto, TB, EBV, CMV, HIV, hepatitis serologies: nl
Normal peripheral blood smear. HLA B27, B51 negative.
Imaging: TTE: nl CT A&P: nl, no HSM
CT chest: irregular opacity nodule posterior segment at right upper lobe. 1.5x1.6 cm large nodule surrounded by cluster of small nodules extending to pleura (Galaxy Sign).
Seronegative RA, adult onset still's as considerations. No improvement on prednisone. Myositis panel: + anti-MDA 5, TIFF-gamma +
Dx: Anti MDA5 (IFN vasculopathy) TIFF-gamma- Amyopathic Dermatomyositis

Problem Representation: 42 y/o M with no PMH presented w/ 2 months of seronegative inflammatory polyarthralgia/polyarthritis, constitutional symptoms, extensive ulcerations, conjunctival injections, and alopecia.

Teaching Points (Francisco)
2 months (subacute) fever -> inflammation -> infections, malignancy (liquid), autoimmune, autoinflammatory
- Infections of subacute categories -> mostly atypical organisms
- Malignancy -> most likely liquid (lymphoma)
- Autoimmune (specific antigen) -> eye and joint affection, look for evidence of vasculitis/serositis
- Autoinflammatory (irrespective of antigen) -> FMF, adult onset Still's

IBD: GI symptoms can start after the other symptoms
Causes of Diffuse hair loss: hormones, alopecia areata, anagen effluvium
Pyoderma gangrenosum -> PIE (Painful Inflammation Erosions) GANG (GI, Arthritis, Neoplasm, Genetic - PAPA) DERM (Dx exclusion, Exam - ulcer, Rule Out Labs, Microscopic - neutrophilic dermatosis) -> autoimmune (amount of inflammation is disproportionate to the consequences as seen in malignancy), lymphoma
DIP involvement -> osteoarthritis, gout, spondyloarthropathies (all types)
Fatigued and tachycardic -> cardiopulmonary compromise
Ulceration + arthritis + fevers -> lupus, dermatomyositis
Very high LDH -> high cell turnover -> hemolytic anemia, spleen, occult malignancy (lymphoma)
HIV test -> is immune system competent?
ANA neg -> decreases probab autoimmune disease
Autoinflammatory -> ON and OFF disease (weeks) and patients have from a young age
Labs neg AND imaging neg -> vasculitis and myositis (amyopathic dermatomyositis is hard to diagnose)
Galaxy sign -> typical of sarcoidosis (can explain the whole scenario even though unusual without nodules) OR nodule can be lung cancer -> dermatomyositis is paraneoplastic
Spondyloarthropathies -> mucosal and joint lining destruction (superficial inflammation)
Vasculitis -> ulcer in distal parts
Seronegative polyarthritis with mucocutaneous lesions evolving -> antibodies negative at first and then were positive -> Amyopathic dermatomyositis +anti-MDA5 and +TIF1gama