When Knowledge Becomes Overwhelming, Go Back to the Basics.

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Expected date of completion: [a]June 2023, [b]June 2022, [c]June 2024
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Background:

"The Great Imitator" is a phrase used to describe a condition that has non-specific symptoms mimicking a variety of entities, making the clinical assessment of the case challenging. This leads to misdiagnosis and delayed treatment.

We report a case in which a disease was diagnosed and treated based on lab findings and pathology. A complicated clinical course led to diagnosing an overlapping condition, and unmasking a "Great Imitator".

Case Description:

A 32-year-old male presented with one month history of fever, constitutional symptoms, arthralgia of the large joints, epistaxis, dyspnea, unintentional 10 pound weight loss, and malar rash.

An outside clinic gave the patient oral azithromycin. However, the rash disseminated to most of his body **(Figure 1**). It was unclear if this was due to the azithromycin.

The patient's past medical history revealed prior COVID-19 infection 6-months prior. Upon admission, the patient tested negative for current COVID-19 infection. A CT revealed splenomegaly and lymphadenopathy suspicious for malignancy **(Figure 2)**. The heterophile monospot test was positive. The patient was admitted for symptomatic hemolytic anemia further leading to the possibility of lymphoproliferative disorder.

The labs showed leukopenia with eosinophilia, non-reactive HIV test, negative hepatitis panel, and positive direct-Coombs . Warm-reactive autoantibodies and direct antiglobulin showed DAT Anti-IgG Anti-C3bd positive and IgG=Pos3+/ C3db=Pos3+. Ferritin, fibrinogen, and ESR/CRP were normal. Haptoglobin was low and D-dimer was elevated.

Presence of Epstein-Barr Virus (EBV) IgM and IgG and EBV antinuclear Ag Ab directed the diagnosis to **EBV infection.** Systemic symptoms improved with oral and topical steroids. Lymph node and skin biopsies were reported as reactive follicular hyperplasia without evidence of lymphoma and dermatitis, suggestive of dermatomyositis. Myositis AsessR Plus Jo-1 Antibody pointed to the diagnosis of **systemic lupus erythematosus (SLE).**

The patient was discharged on tapering steroids and was started on hydroxychloroquine and methotrexate.

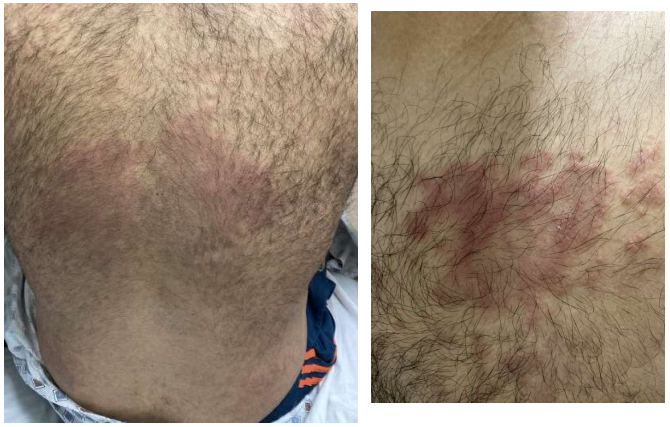

Figure 1: Disseminated maculopapular rash (picture of the back).

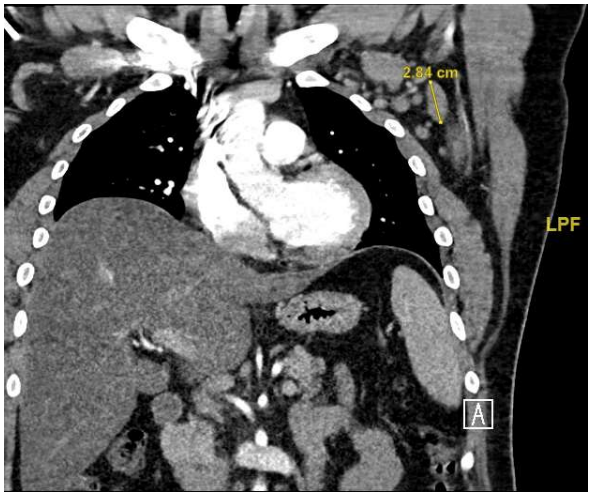

Figure 2: CT with contrast showing left axillary lymphadenopathy.

Discussion:

Differential diagnoses

- EBV
- Drug Rash Eosinophilia with Systemic Symptoms (DRESS)
- Dermatomyositis
- Neoplastic process.

Further workup diagnosed EBV infection. Biopsy ruled out malignancy, and ruled in DRESS and dermatomyositis vs cutaneous lupus erythematosus. After correlation with serology, an autoimmune process was diagnosed.

Association of hemolytic anemia and mononucleosis has been documented **only in 21 cases,** with autoimmune antibodies reported in six, mostly cold type.

Conclusion:

Take home point: Adequate assessment is necessary for vague symptoms.

The patient presented with constitutional symptoms, disseminated rash, and drug exposure issue. At this point, workup revealed significant adenopathy, monotest positive, and hemolytic anemia.

Our patient had SLE with overlapping EBV but a drug reaction could have clouded the picture

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