

Case Study 3

18 Year Old Female Chief Complaint: chronic fatigue and achy joints Dr. Nehad Soloman, Phoenix, AZ



An 18 year old female was referred to Dr. Nehad Soloman with chief complaint of diffuse-dull achy joints, which had been worsening over the past few months. The patient also reported experiencing fatigue, depression and anxiety for the past 6 months.

In addition, the patient noted having patchy alopecia, along with a rash, thought to be caused by photosensitivity.

Upon clinical examination, Dr. Soloman found the patient had painless oral ulcers on her hard and soft palates, as well as swollen cervical lymph nodes and a medial history of recurrent upper respiratory infections.



Patient's Previous Lab Work

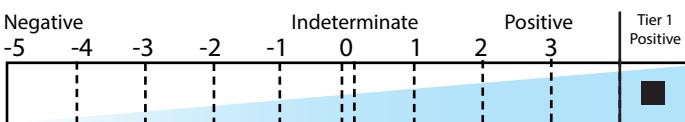
- Lymph node biopsy - negative for malignancy
- Scant polymorphic lymphoid population with negative flow cytometry
- Normal- Sed Rate, CRP, ACE, EBV, Quant gold, Coccidioidomycosis test
- Low -Serum iron test
- Negative - ENT, ID and Hem-Onc consults

Key Assays	Results	Reference Range
ANA by IIF	1:640 (Homogeneous)	Negative <1:80 Positive ≥1:80
ANA by ELISA	98 Units	<20 Negative 20-59 Positive ≥60 Strong Positive
CB-CAPs - EC4d	138 Net MFI	<15-Negative 15-75 Positive >75 Strong Positive
CB-CAPs - BC4d	63 Net MFI	<61-Negative 61-200 Positive >200 Strong Positive
Other assays of interest:		
<ul style="list-style-type: none"> • Anti-dsDNA- Negative • Anti-Smith - Negative • APS, RA & Thyroid panel - Negative 		

To help assess the patient, Dr. Soloman requested the AVISE CTD test as well as additional labs including:

- C3 & C4 – normal test results
- Urinalysis- normal test results

AVISE CTD Results: Tier 1 Positive



Based on clinical assessment and with the help of the AVISE CTD test, the patient was diagnosed with SLE. The positivity of CB-CAPs (EC4d & BC4d) helped identify the activation of the complement system, despite normal C3/C4 levels and negative anti-dsDNA and anti-Smith results.

To help manage the patient's condition, Dr. Soloman placed her on hydroxychloroquine (HCQ). At follow up 3 months later, the patient reported remarkable symptom improvement.