Stroke as the Initial Manifestation of Lupus

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INTRODUCTION

Neuropsychiatric Systemic Lupus Erythematosus (NPSLE) is not an uncommon manifestation in Systemic Lupus Erythematosus (SLE) patients, but it is rarely the initial presentation. Compared to the general population, those with SLE have an eight-fold increase of cerebrovascular diseases.

NPSLE is a clinical manifestation of SLE that involves the central and the peripheral nervous system. This risk is further increased with the presence of antiphospholipid antibody, which is present in 30% to 40% of SLE patients.

CASE DESCRIPTION

We present a case of a 31-year-old female with history of medically managed epilepsy disorder since the age of 24, presented with slurred speech, confusion and right sided weakness. She had history of oropharyngeal ulcers, arthralgia, and photosensitivity.

Denied family history of any autoimmune disorders.

Physical Exam:
Vital Signs: Temp: 97.9 F, HR 65, RR 20, BP 115/71, SpO2 100% on room air
General appearance- alert but appears intermittently confused and slow to respond, in no acute distress
HEENT- pupils equal and reactive, extraocular eye movements intact, normal conjunctiva, bilateral external ears normal, normal and patent, no erythema or discharge
Mouth - mucous membranes moist, pharynx normal without oral lesions
Heart - normal rate, regular rhythm, no murmur
Chest - clear to auscultation, no wheezes, rales
Abdomen - soft, nontender, nondistended, no masses or organomegaly
Neurological - alert, oriented, **normal speech but slow to respond**, CN II-XII grossly intact bilaterally, muscle strength 4/5 throughout, **left facial paralysis, anomic aphasia, dysmetria**, no tremor, spasticity or seizure activity
Musculoskeletal - no joint tenderness, deformity or swelling
Extremities - peripheral pulses normal, no pedal edema, no clubbing or cyanosis
Skin - normal coloration and turgor, no rashes, no suspicious skin lesions noted

LABS

Pertinent laboratory tests:
- Thrombocytopenia
- Low complement C3 and C4
- Elevated double stranded DNA of 6
- Positive ANA with 1:320 titer of dense speckled DNA
- Positive B2 glycoprotein 1 IgG Ab
- Elevated cardiolipin IgG and IgM.

IMAGING

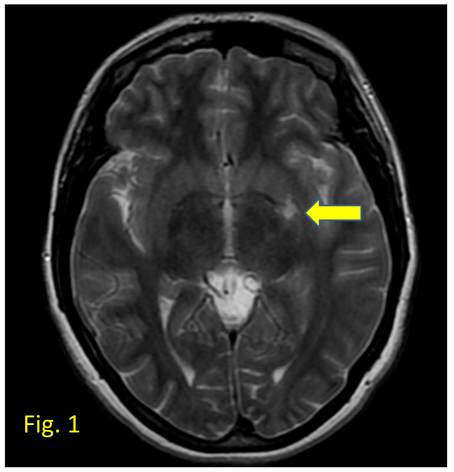
Fig. 1

Figure 1. MRI of head significant for Acute infarction of the left-sided basal ganglia.

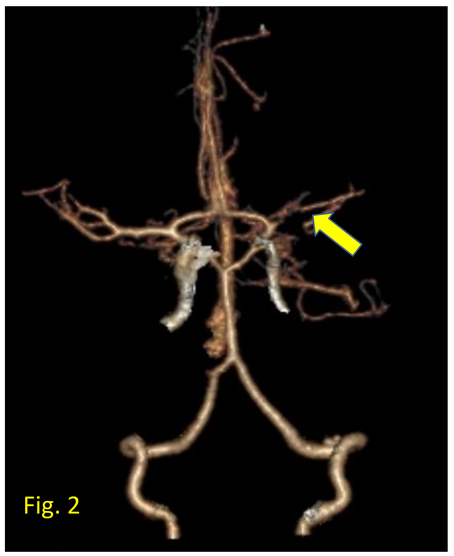
Fig. 2

Figure 2. CTA of head significant for left M1 segment middle cerebral artery demonstrates high-grade stenosis estimated at between 60 and 75%.

DISCUSSION

This young female patient has no common predisposing factors for stroke which includes hypertension, diabetes, hyperlipidemia, atrial fibrillation or obesity. Extensive inpatient work up for her stroke revealed active SLE as the only explainable etiology. Given her active SLE, her stroke has likely been the manifestation of two mechanisms: autoimmune and inflammatory; vascular injury and occlusion.

Her stroke was managed with Aspirin, Clopidogrel and Atorvastatin.

Her active SLE was managed with high dose IV corticosteroids followed by oral corticosteroids, and subsequently, Rituximab.

For secondary stroke prevention in SLE, she was initiated on anticoagulation prior to discharge.

LEARNING POINTS

- Ischemic stroke in any young patient should raise concern for NPSLE, warranting an extensive investigative work up and management.

REFERENCES