A 14-year old girl presented with sudden painless vision decline in the left eye for 5 days, without vision decline in the right eye. Her visual acuity was 20/20 OU 6 months earlier. She reported constant fatigue, occasional dizziness and headache, mild pain in the lower limbs, and intermittent claudication over the past 12 months, with no history of trauma, surgery, COVID-19 infection, influenza, or other infection.

Visual acuity was light perception OD and no light perception OS. Both pupils dilated, with the right eye reacting sluggishly to light and the left eye being nonreactive. Intraocular pressure was 14 mm Hg OD and 11 mm Hg OS. Posterior examination revealed optic disc edema in each eye, and the left eye had a swollen and pale optic disc with segmental blood flow in retinal vessels (Figure 1A). Fluorescein angiography of the left eye had prolonged arm-to-retina circulation time and multiple microaneurysms at the superotemporal and inferotemporal retina (Figure 1B). Visual evoked potentials were negative in both eyes. She had an increased white blood cell count (10 540/μL; to convert to ×109 per liter, multiply by 0.001) and elevated erythrocyte sedimentation rate (73 mm/h) and had positive findings for cyclic citrullinated peptide antibody and antinuclear antibody. Other serology test results were negative, including hepatitis B and C virus, HIV, rapid plasma reagin, and anti–double-stranded DNA.

WHAT WOULD YOU DO NEXT?

A. Perform diagnostic anterior chamber and/or vitreous tap

B. Initiate intravitreal corticosteroids

C. Obtain brain magnetic resonance imaging

D. Arrange a genetic test