A previously healthy 20-year-old Asian woman was hospitalized in the neurology department after experiencing fever, malaise, headache, nausea, vomiting, and neck stiffness for 2 weeks. Computed tomography scan results revealed meningoencephalitis. Her systemic inflammatory markers were elevated, including a left-shifted leukocytosis with a white blood cell count of 19 610 μL (normal values, 3500-9500 μL), a monocyte count of 900 × 103 μL (normal values, 100-600 × 103 μL), and normal C-reactive protein level. Cerebrospinal fluid studies were suggestive of viral meningoencephalitis, including elevated protein levels (0.074 g/dL; normal values, 0.015-0.045 g/dL) and increased leucocyte (93 × 106/L; normal values, 0-8 × 106/L). Cytological examination showed an increase in lymphocytes. Intracranial pressure was elevated (>320 mm H2O), and the glucose level was 2.08 mmol/L (normal values, 2.5-4.5 mmol/L).

On day 2 of hospitalization, the patient experienced blurred vision in both eyes. Her visual acuity was 20/500 in both eyes. Both eyes had normal pupillary responses, color vision, and intraocular pressures. The results of an anterior chamber examination were unremarkable. The results of scanning laser ophthalmoscopy of both eyes revealed substantial inflammation, including marked disc edema, retinal vein dilation and tortuosity, extensive retinal vascular sheathing (Figure 1). Optical coherence tomography showed vitritis and cystoid macular edema in both eyes. Fluorescein angiogram revealed tortuous dilatation of retinal venous vessels with fluorescence leakage, while the optic disc exhibited hyperfluorescence.

WHAT WOULD YOU DO NEXT?

A. Administer systemic corticosteroids

B. Evaluate for systemic infectious disease

C. Initiate immunomodulatory therapy with intravenous immunoglobulin

D. Intravitreal injection with anti– vascular endothelial growth factor