Teaching NeuroImages: Cat-scratch optic neuropathy without neuroretinitis

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Figure 1 Fundus examination and contrast-enhanced MRI

Initially noted optic disc swelling (A) improved (B) and eventually resolved with antibiotics (C). Axial (D) and coronal (E) contrast-enhanced T1-weighted MRI showed enhancement at the left optic nerve-globe junction (arrowheads), which is characteristic of cat-scratch disease.² No brain lesions were present.

A 57-year-old woman reported blurred vision of the left eye with fever and malaise for 3 weeks. Visual acuity was 20/40 with an afferent pupillary defect. The optic nerve was swollen (figure 1A) with a normal macula. Skin abnormalities were evident on her arms (figure 2). Serologic studies indicated recent infection with *Bartonella henselae* (immunoglobulin M $\geq 1:20$, immunoglobulin G $\geq 1:1,024$). There was complete recovery following treatment with doxycycline and rifampin. It is important for clinicians to identify optic neuropathy associated with cat-scratch disease, which often has a favorable prognosis. Stellate macular exudates are absent in more than 50% of patients.¹

AUTHOR CONTRIBUTIONS

Dr. Vodopivec conceived the manuscript, drafted the initial manuscript, revised the manuscript, and created the figures. Dr. Shah was responsible for the care of the patient, including diagnosis and treatment, and revised the manuscript. Dr. Prasad interpreted the MRI findings and revised the manuscript. Dr. Cohen was responsible for the care of the patient, including diagnosis and treatment, conceived the manuscript, drafted the initial manuscript, and revised the manuscript.

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DISCLOSURE

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Figure 2 Skin findings

Multiple cat-scratch marks with healing papules and pustules on both arms.

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