

## BACKGROUND

*Bartonella henselae* infection also known as Cat-Scratch Disease generally occurs in immunocompetent individuals at an incidence of 0.7 cases per 100,000 and occurs mostly in individuals between ages of 15 to 49 years.<sup>1</sup>

## CASE REPORT

47-year-old female with history of prediabetes, and hypothyroidism presented with occipital headache and left eye vision loss of 4 days duration. Patient's PCP noted elevated blood pressure at 174/102 and sent her to ED for further workup. She reported central vision loss with intact peripheral vision in the left eye and occipital headaches for which she tried ibuprofen without any improvement. Neurology was consulted for acute vision loss in the left eye. On further review, she reported living with 12 cats and frequent cat scratches on her skin. Physical exam was remarkable for superficial cervical lymph nodes swelling, Left eye findings: vision-counting fingers, relative afferent pupillary defect, central scotoma, and 4+ disc edema with macular edema. Right eye: visual acuity 20/20, full visual field, normal fundus exam. CT and MRI Head w/contrast was unremarkable. MRI orbits w/contrast showed focal enhancement in the left optic nerve head, protrusion into the vitreous and questionable enhancement of the adjacent uvea/retina (Figure 1). CSF showed elevated glucose, normal protein, cell count of 8 with lymphocyte predominance. Serum studies revealed elevated CRP at 72.4, ESR 55, bartonella hensale IgG > 1:1024, IgM 1:256 and mild transaminitis. She was diagnosed with left ocular bartonellosis associated neuroretinitis.

## RESULTS

She was started on Doxycycline 100mg BID and Rifampin 300mg BID for 28 days along with oral steroids.<sup>2</sup> At one week follow up, visual acuity improved to 20/800 and fundus examination showed decrease in optic disc swelling with classic macular star in the left eye, and normal exam the right eye (Figure 2a and b).

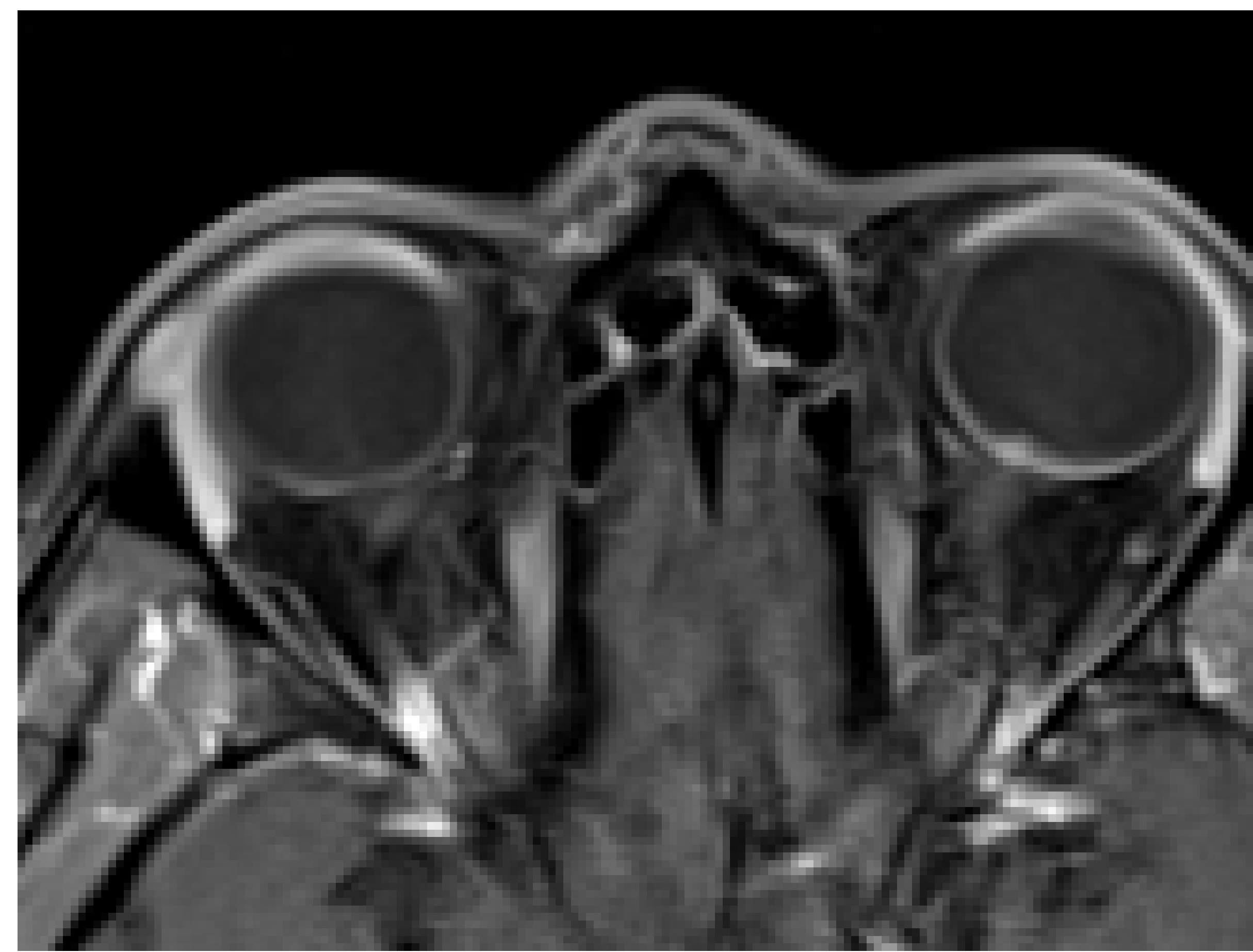


Figure 1: Enhancement of the optic nerve head on the left with additional protrusion into the vitreous, T2-weighted MRI TSE Post Contrast sequence



Figure 2a: Wide field color fundus photography showing Left eye (OS) Neuroretinitis with macular star

## RESULTS cont.



Figure 2a: Wide field color fundus photography showing Right eye (OD) within normal limits

## CONCLUSIONS

A thorough history and examination is important in guiding clinical management.

## REFERENCES

1. Nawrocki CC, Max RJ, Marzec NS, Nelson CA. Atypical Manifestations of Cat-Scratch Disease, United States, 2005-2014. *Emerg Infect Dis.* 2020 Jul;26(7):1438-1446. doi: 10.3201/eid2607.200034. PMID: 32568056; PMCID: PMC7323523.
2. Habot-Wilner Z, Trivizki O, Goldstein M, Kesler A, Shulman S, Horowitz J, Amer R, David R, Ben-Arie-Weintrob Y, Bakshi E, Almog Y, Sartani G, Vishnevskia-Dai V, Kramer M, Bar A, Kehat R, Ephros M, Giladi M. Cat-scratch disease: ocular manifestations and treatment outcome. *Acta Ophthalmol.* 2018 Jun;96(4):e524-e532. doi: 10.1111/aos.13684. Epub 2018 Mar 5. PMID: 29504674.

CSF= Cerebrospinal fluid; NCC= Normal cell count; CRP= C-reactive protein; TSE= Turbo spin echo