

## Re: Intravenous tocilizumab in the treatment of resistant optic perineuritis: a case report



Dear Editor,

We read the report by Maleki et al.,<sup>1</sup> and while we find it interesting, we believe that it contains significant errors that call into question the diagnosis optic perineuritis (OPN) and invalidate the conclusions made by the authors. The authors have failed to demonstrate that the patient truly had OPN, which relies mostly on neuroimaging for diagnosis. In Figure 1, the authors claimed to have shown enhancement of the optic nerve sheath near the right globe based on one unenhanced axial T2-weighted magnetic resonance imaging (MRI) image of the brain. It is not possible to assess enhancement on this MRI sequence (it can only be seen after gadolinium is administered). The authors needed to show the T1 postcontrast MRI image of the orbits with fat suppression, which should demonstrate optic nerve sheath enhancement. Likewise, the authors failed to provide objective evidence that the patient actually had a recurrence of OPN when his eye pain worsened because MRI of the orbits was reported as normal at that time. The work-up presented for OPN, which should include investigations for infectious (e.g., syphilis) and inflammatory (e.g., vasculitides such as granulomatosis with polyangiitis) causes, also was incomplete.<sup>2</sup>

From a neuro-ophthalmology perspective, we found it unusual that the patient was treated with only a single dose of intravenous methylprednisolone. The typical standard treatment for inflammatory optic neuropathies is 3–5 days of high-dose corticosteroids, which is often followed by a longer tapering dose of oral prednisone starting at 1 mg/kg of body weight.<sup>3</sup> The authors also did not describe the timeline between the first dose of intravenous steroids and the first dose of tocilizumab. Based on our reading of the report,

it is plausible that the intravenous methylprednisolone was the reason that the patient improved initially. The authors also made a statement at the end of their report documenting that the patient complained about returning pain at the visit for his second monthly tocilizumab infusion and that this “was confirmed with optic nerve head leakage on FA.” Pain is a subjective symptom and thus cannot be confirmed with fluorescein angiography. We would encourage the authors to collaborate with their neuro-ophthalmology and neuroradiology colleagues when treating patients with OPN, especially if reporting their results for publication, to avoid diagnostic and treatment errors.

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## References

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## Footnotes and Disclosure

The authors have no proprietary or commercial interest in any materials discussed in this correspondence.

## Reply: Intravenous tocilizumab in the treatment of resistant optic perineuritis: a case report



Dear Editor,

We thank Micieli and Margolin for reading the correspondence about the case of resistant optic neuritis treated successfully with tocilizumab infusions; however, we were astonished at how confidently they criticized the diagnosis and treatment of a complicated case without asking for more evidence. First, we would like to mention that the word limit did not allow the authors to include all the history, laboratory tests, and paraclinical diagnostic tests in the

correspondence. In addition, this patient presented to us with more than 300 pages of records of previous eye examinations, laboratory work-ups, and imaging reports done by a group of neuro-ophthalmologists and neuroradiologists in an academic centre.

For those who are not familiar with the field of ocular immunology and inflammation, we would like to clarify that it is necessary to rule out all infectious etiologies (e.g., tuberculosis, Lyme disease, syphilis, herpes family viruses, etc.) and noninfectious etiologies (e.g., arcoidosis, granulomatosis with polyangiitis, polyarteritis nodosa, systemic lupus erythematosus, etc.) in all ocular and orbital inflammatory diseases prior to any treatment. All possible infectious and noninfectious causes of optic

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