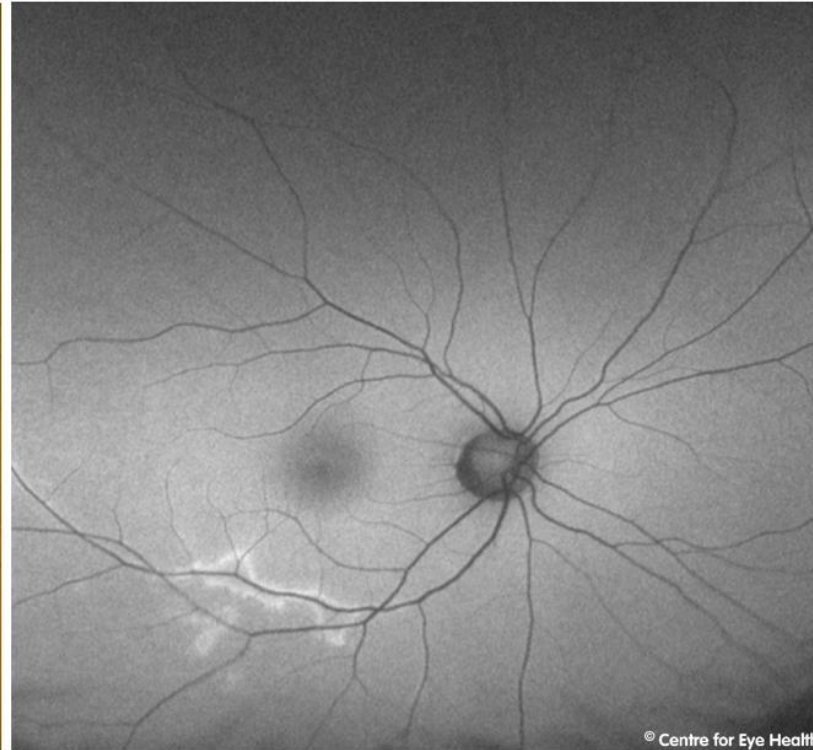




## CFEH Facebook Case #98

A 40 year old Middle Eastern female presented for examination. She has been diagnosed with multiple sclerosis and has a history of thyroid cancer. Both eyes had a similar appearance so only the right eye is shown. What is the most likely cause of the hyper-autofluorescence seen along the inferior venous arcade?



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# ANSWER

This patient has a slight silvery glow around the inferior venous arcade, seen on Optomap. There is a corresponding hyper-autofluorescence. These findings are consistent with a previous periphlebitis. This is an inactive presentation of the condition – active periphlebitis typically presents with localised inflammatory infiltrates surrounding the retinal veins.

Multiple sclerosis causes the degeneration of axons and approximately 10% of sufferers show retinal periphlebitis. Recent studies have suggested a correlation between the presence of periphlebitis and increased disease activity and suggested this as a prognostic biomarker for disease severity (Ortiz-Perez et al. 2013). Increased disease activity is significant as it is associated with more severe brain atrophy and disability (Barkhof et al. 2009).

Other possible causes of periphlebitis include sarcoidosis, lyme disease, pars planitis, tuberculosis and Eales disease.

## References

Barkhof F, Calabresi PA, Miller DH, Reingold SC. Imaging outcomes for neuroprotection and repair in multiple sclerosis trials. *Nat Rev Neurol* 2009;5:256–266

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Ari J. Green, corresponding author<sup>1</sup> Stephen McQuaid,<sup>3</sup> Stephen L. Hauser,<sup>1</sup> Ingrid V. Allen,<sup>2</sup> and Roy Lyness

Ortiz-Pérez, S. Martínez-Lapiscina, E. Gabilondo, I., Fraga-Pumar, E., Martínez-Heras, E., Saiz, A., Sanchez-Dalmau, B., Villoslada, P. (2013) Retinal periphlebitis is associated with multiple sclerosis severity. *Neurology*. 2013 Sep 3; 81(10): 877–881.