

# Combined central retinal artery and vein occlusion in lupus

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## DESCRIPTION

A girl aged 16 years presented with sudden loss of vision in the left eye (LE) for 1 day. Visual acuity was 6/6 in the right eye (RE) and perception of light in LE. LE had relative afferent pupillary defect. RE fundus had cotton wool spots (figure 1A). LE fundus showed combined central retinal artery occlusion (CRAO) and central retinal vein occlusion (CRVO) (figure 1B). Her history of alopecia, fever and arthritis for 6 months, bilateral cervical adenopathy, hard palate ulcers, leucopenia (2300/mm<sup>3</sup>), lymphopenia (621/mm<sup>3</sup>), positive antinuclear antibody and undetectable serum C4 led us to diagnose systemic lupus erythematosus (SLE). Lupus anticoagulant, anticardiolipin (IgM, IgG) and anti-β<sub>2</sub> glycoprotein1 (IgM, IgG) antibodies were negative. She was treated with high-dose corticosteroids and anticoagulant therapy. On follow-up, she was also started on immunosuppressive agent methotrexate as a part of steroid-sparing therapy. Two weeks later, she received intense

pan-retinal photocoagulation in LE to prevent neovascular glaucoma. Despite these efforts, she developed vitreous haemorrhage in LE on follow-up. Combined CRAO and CRVO though rare is a severe ocular complication of SLE resulting in irreversible loss of vision. Prompt diagnosis and early management in such a case is important to treat underlying systemic vasculitis and to prevent occurrence of similar episode in the other eye.<sup>1 2</sup>

## Learning points

- ▶ Eye manifestation of systemic lupus erythematosus (SLE) may be sight threatening and can be an indicator of active disease.
- ▶ Spectrum of retinopathy in SLE varies from few isolated cotton wool spots to the severest form consisting of large retinal vascular occlusions.

**Contributors** SMP is responsible for managing the patient, idea, critical analysis and editing of manuscript. VSV is responsible for collection of data, writing and editing manuscript. DPM is responsible for managing the patient, editing and analysis of manuscript.

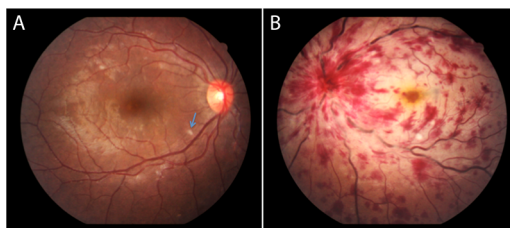
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## REFERENCES

- 1 Sivaraj RR, Durrani OM, Denniston AK, *et al.* Ocular manifestations of systemic lupus erythematosus. *Rheumatology (Oxford)* 2007;46:1757–62.
- 2 Chang PC, Chen WS, Lin HY, *et al.* Combined central retinal artery and vein occlusion in a patient with systemic lupus erythematosus and anti-phospholipid syndrome. *Lupus* 2010;19:206–9.



**Figure 1** (A) Right eye fundus showing cotton wool spots (blue arrow). (B) Left eye fundus showing disc oedema, dilated and tortuously thrombosed retinal veins, arteriolar attenuation, extensive flame-shaped haemorrhages, retinal pallor and cherry-red spot at macula suggesting combined central retinal artery occlusion and central retinal vein occlusion.



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