

Sir,
CVID causing a granulomatous uveitis and optic disc neovascularisation mimicking sarcoid

Common variable immunodeficiency (CVID) is the second commonest form of primary immunodeficiency in the

Caucasian population with a prevalence of approximately 1:20,000. CVID follows a granulomatous course in approximately 10% of patients, and this can mimic sarcoidosis.¹ We report a case of CVID causing a granulomatous uveitis with optic disc neovascularisation and vitreous haemorrhage.

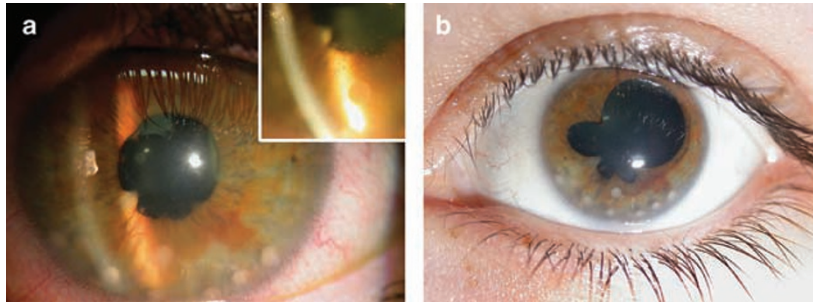


Figure 1 Anterior segment photographs at presentation, showing (a) an injected left eye with a mixture of large mutton-fat and small granulomatous keratic precipitates (inset). (b) Koepple (pupil margin) iris nodules with posterior synechiae.

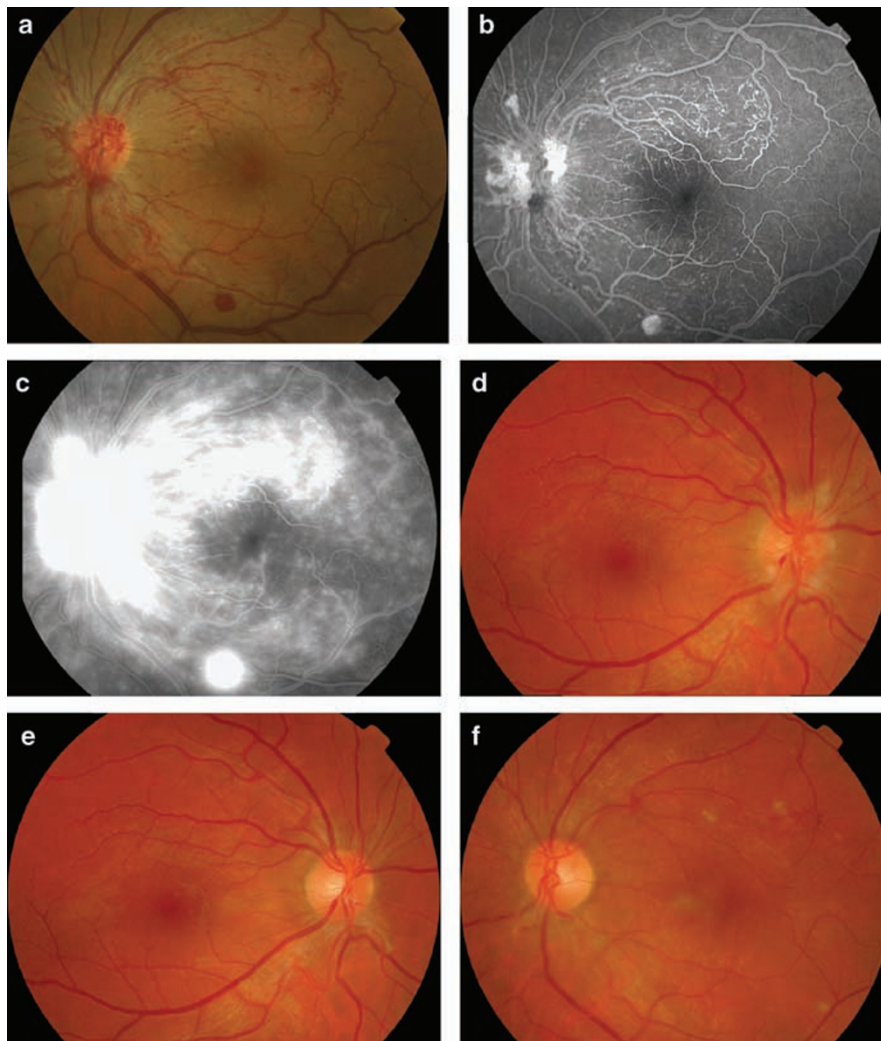


Figure 2 (a) Colour fundus photograph of the left eye at presentation showing retinal vasculitis and disc neovascularisation. Fluorescein angiograms during (b) early and (c) late venous phase. (d) Colour fundus photograph of right eye showing the development of disc swelling 1 month after presentation. Fundus photographs of right (e) and left eyes (f) 2 months after left intraocular steroids, the neovascularisation and disc swelling have resolved.

Case report

A 27-year-old lady, with known CVID diagnosed at age 17, and receiving weekly subcutaneous antibody infusions, presented to the eye clinic with a 1-month history of a left photophobic red eye associated with gradual loss of vision. On examination, her vision was 6/6 in the right eye and counting fingers in the left eye unaided. She had a mild right anterior uveitis and a marked left anterior uveitis with several large mutton-fat keratic precipitates, multiple koeppe and busacca nodules, and posterior synechiae formation (Figure 1). Fundoscopy of the left eye revealed a mild vitreous haemorrhage associated with gross disc neovascularisation, a retinal vasculitis, and macular oedema (Figure 2a). Initial blood tests were within the normal range including inflammatory markers, serum ACE, and lymphoma screen. Her chest X-ray revealed bilateral hilar shadowing and a subsequent CT scan confirmed enlarged mediastinal lymph nodes with normal lung parenchyma. This is a common finding in granulomatous CVID.

She was commenced on oral and topical steroids. However, her vasculitis failed to settle, and 1 month after presentation she began to develop disc swelling in the right eye (Figure 2d). A fundus fluorescein angiogram (FFA) at this stage revealed macular oedema with no evidence of any non-perfusion (Figures 2b and c). She was subsequently given an intravitreal injection of triamcinolone (4mg in 0.1ml) into the left eye. Vision rapidly improved and by 2-month post injection was 6/6 bilaterally and the neovascularisation had almost completely disappeared (Figures 2e and f).

Comment

The diagnosis of CVID is made on the clinical history of recurrent infection, usually of the respiratory tract, in the context of reduced total IgG. Up to 30% of patients develop non-infectious complications including autoimmune disease and malignancy. Patients with CVID have been known to develop conjunctival granulomas, granulomatous anterior and posterior uveitis, multifocal choroiditis, disc swelling, retinal vasculitis, and retinal neovascularisation; all of which are findings in sarcoid.²⁻⁴ We believe this to be one of the most florid cases of retinal vasculitis, and the first to describe disc vascularisation.

References

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Sir,

A simple method to view stereo-images of the optic nerve head on ordinary computer monitors

Modern optic nerve head (ONH) analysers can now give detailed information about the structure of the ONH. However, stereoscopic optic disc pictures (SODP) are still important in glaucoma management.¹ At present, these are viewed either through special viewers for slides or computer monitors, or by special monitors with out a viewer.² The principle is to simultaneously present slightly disparate images to the corresponding eyes.

Hobbyists use animated images (AIs) in which the two images in the stereo-pair are presented alternately in rapid succession, which creates an illusion of simultaneous presentation, and provide some information about the depth of different structures. The principal of the AI was adapted to view the digital SODP. Sequential stereo-images of the ONH were taken by a Canon CF-60S retinal camera fitted with an Olympus E-330 digital SLR camera body. The images were cropped to highlight the ONH and were used to construct graphics interchange format (gif) AIs, the outline of the ONH from the two images being kept on the same position. The interval between the alternating images was kept at 0.15 s. The resulting animated or 'wiggling' images, although looked unfamiliar at first, and were not as natural as by the conventional methods, were able to provide nearly the same information about the contour of the optic disc as the conventional side-by-side pair as seen through a stereo-viewer.

Proper studies are needed to determine how favourably the AIs compare with the side-by-side SODP seen through a stereo-viewer, as these images can be viewed without any special viewer, from any position or distance, and are convenient to use in electronic medical records and tele-ophthalmology. Furthermore, the depth can be perceived by individuals with abnormal stereoscopic vision. The AIs can easily be created with most graphic software. As in other methods, the better the original images and stereo-separation, the better will be the stereoscopic effect. AIs can be used for a quick glance, and kept in record along with the conventional methods.

A PowerPoint slide show is available as supplementary information at the journal website (file name: animated_stereo.pps).

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