

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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S Harsum, S Lear and P Wilson

Department of Ophthalmology, Royal Free Hospital, Hampstead, London, UK
E-mail: paulinewilson47@hotmail.com

Eye (2009) **23**, 241-242; doi:10.1038/eye.2008.66;
published online 21 March 2008

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).

References

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SA Rizvi

Department of Ophthalmology, Baqai Medical University, Karachi, Sindh, Pakistan
E-mail: samjadhr@gmail.com

Eye (2009) **23**, 242–243; doi:10.1038/eye.2008.353; published online 21 November 2008

Supplementary Information accompanies the paper on *Eye* website (<http://www.nature.com/eye>)

Sir,
Exploring glaucoma awareness and the utilization of primary eye care services: community perceived barriers among elderly African Caribbeans in Chapeltown, Leeds

We read with interest the recent report of the ReGAE 2 study by V Cross *et al*¹ which closely matched the findings of a community-based qualitative study among the black African-Caribbean population in Chapeltown, Leeds, which we undertook in 2006 as fulfilment of a Masters in Public Health dissertation.

Our study was undertaken to explore knowledge and attitudes concerning glaucoma and investigated the utilization and barriers to uptake of primary eye care services (PECS). Although otherwise similar to the ReGAE 2 study in methodology and ethnic mix of participants, we took a purposive sample of the older population, median age of 75 compared to a median age of 42 in the ReGAE 2 report. Individual face to face semi-structured transcribed interviews were conducted with 16 respondents and despite the demographic difference, many similarities in results were identified.

The utilization of PECS was largely symptom driven in both studies; however, in our older population, once a pattern of optometrist attendance had been established, receipt of optometrist letters advising repeat testing was reported as a substantial incentive for continued attendance (8/16). Family members were again reported as the most important source of information about glaucoma, although 14/16 (87%) had heard of glaucoma compared to 67% in the ReGAE 2 study.

Barriers to utilization of PECS identified were very similar in both studies. Perceived cost of eye tests (despite all our participants being over 60 years old and therefore entitled to free testing) (6/16), mistrust of PECS 5/16, fear of being pressurised to purchase expensive glasses 6/16, were all disappointingly prevalent in this older population. Only three of the 16 respondents knew they could get free sight tests.

Another additional important barrier to utilization of PECS for the community in Leeds was the lack of optometrist in the Chapeltown area. Mapping of PECS in Leeds and comparison with socio-economic status (equity profile) revealed an unsurprising but important mismatch.

Initiatives to overcome attitudinal barriers to uptake of PECS are necessary both from the service user and the

provider perspective. Accessibility of PECS in African-Caribbean and socio-economically deprived communities must also be addressed, possibly by community or health centre-based PECS provision. This would simultaneously address many of the 'fear-based' barriers as well as perceived transport difficulties for elderly populations needing to travel to more affluent areas to access a service they poorly understand the need for.

Reference

- 1 Cross A, Shah P, Bativala R, Spurgeon P. ReGAE 2: glaucoma awareness and the primary eye care services; some perceptions among African Caribbeans in Birmingham, UK. *Eye* 2007; **21**: 912–920.

JF Awobem¹, A Cassels-Brown², JC Buchan³ and KA Hughes⁴

¹Hull and East Yorkshire Eye Hospital, East Yorkshire, UK

²Department of Ophthalmology, St James's University Hospital, Leeds, UK

³Bradford Royal Infirmary, Bradford, UK

⁴School of Sociology and Social Policy, University of Leeds, Leeds, UK

E-mail: Andy.Cassels-Brown@leedsth.nhs.uk

Eye (2009) **23**, 243; doi:10.1038/eye.2008.42; published online 14 March 2008

Sir,
Response to Awobem *et al*

We thank the respondents for their helpful discussion concerning Cross *et al*.¹ We fully endorse all their comments regarding the need to optimise utilisation of primary eye-care services by the community they serve. In our paper, we focused on the problems perceived and experienced by younger members of the African Caribbean community in an area of profound social deprivation in inner city Birmingham. The key to early glaucoma detection is to set up a community-based case-finding system, accessible and acceptable to the entire local community, which takes proper account of the need for culturally sensitive service delivery. There is a high prevalence of blinding disease in young African-Caribbeans, and the system must be responsive to the particular needs of this young working constituency.

Reference

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P Shah and V Cross

University of Wolverhampton, UK
E-mail: vinette.cross@wlv.ac.uk

Eye (2009) **23**, 243; doi:10.1038/eye.2008.43; published online 29 February 2008