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Neither author has any proprietary interest arising from this publication. This work has not been previously presented at any major meeting and has not been submitted to any other journal

Eye (2006) **20**, 1388–1390. doi:10.1038/sj.eye.6702228; published online 20 January 2006

Sir, Outcomes of macular hole surgery

We note with interest that Jaycock *et al*,¹ in their report on the outcomes of macular hole surgery, found no evidence of ICG retinotoxicity. This is based on their findings that patients who underwent indocyanine green (ICG) assisted internal limiting membrane (ILM) peel had better anatomical and visual outcomes than both the ILM peel group as a whole or those who had no ILM peel. As they noted there are many publications on the subject of ICG toxicity to the retina, often with contradictory conclusions. We have previously reported our experience with ICG-assisted ILM peel.² Our patients achieved a high rate of anatomical hole closure but visual results were disappointing. As a result of these findings we performed an audit of macular hole surgery in our department. This confirmed the poor visual outcome with ICG-assisted ILM peel described in our paper and recommended we discontinue ICG use and use Trypan blue as an alternative. Our current practice is to use membrane blue (DORC International bv, Zuidland, Holland) for all cases requiring ILM peel. Recently, we have reaudited our macular hole outcomes in light of this change in practice.

The anatomical success and visual improvements of both our initial and repeat audit are summarised in Table 1. The high rate of anatomical hole closure with ICG remains with membrane blue but without the adverse effect on visual outcome we experienced with ICG. No other aspects of surgery have changed between the two audits with the vast majority of the surgery performed by the same two vitreoretinal surgeons. We believe our audit results confirm the potentially toxic effect of ICG on the retina. As discussed in our initial paper the concentration of ICG may be the main factor
 Table 1
 Anatomical and functional outcomes following macular hole surgery

	Initial audit		Reaudit	
	$All \\ cases \\ (n = 123)$	ICG cases only (n=21)	All cases (n=27)	Membrane blue cases only (n=17)
Anatomical success (%)	85	92	81	100
Visual improvement (Snellen-converted logMAR)	0.48	0.03	0.4	0.41

influencing functional outcome. This appears to be supported by the recent paper by Jaycock *et al*, as they found no evidence of toxicity with a 0.05% solution of ICG while our adverse outcomes followed use of a 0.5% solution. In light of our audit finding we will continue to use membrane blue to assist in ILM peeling but ICG does appear to be safe in low concentrations.

References

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Eye (2006) **20**, 1390. doi:10.1038/sj.eye.6702231; published online 20 January 2006

Sir,

Report of a novel lobular chorioretinal dystrophy

Atrophy involving the choroid and retina is a consequence of infective, inflammatory, or degenerative

processes and classified according to observed patterns and geographic location.¹ Formulating a congenital, hereditary, or acquired pathological cause and diagnosis can be challenging in patients with a late presentation. We report a distinctive case of symmetrical, chorioretinal atrophy not previously described.

Case report

A 67-year-old woman presented with a 14-year history of abnormal colour vision and decreased vision over the last 5 years in bright sunlight and dim light. There was no significant past medical history other than hypertension, which was well controlled with oral ramipril. Family history included paternal blindness of unknown cause at the same age and a 35-year-old



Figure 1 Fundoscopic photographs of right and left eyes.

daughter who had noticed mild nyctalopia over the past 3 years.

On examination, the visual acuity was 6/6 OD 6/9 OS. Colour vision was absent in each eye. No abnormality was noted in the anterior segments and bilateral, mild nucleosclerotic cataracts were present. The vitreous was clear bilaterally with no evidence of previous inflammation. The striking abnormality was widespread mid peripheral areas of RPE atrophy in a scalloped, lobular pattern (Figure 1). Temporally there were areas of bone spicule-like pigmentation. Centrally there was a preserved area of RPE at each fovea. Both optic nerves appeared unremarkable with healthy neuroretinal rims. Goldmann visual fields showed relatively well preserved visual fields with paracentral ring scotomas and also a temporal scotoma in the right eye (Figure 2). Electrophysiology was unrecordable. Serum ornithine levels were within normal range. The fundal appearances and visual fields have remained unchanged since the patient was first seen in 2003 (Figure 3).

Comment

This unusual retinal dystrophy could represent a rare, autosomal dominant phenotype. The positive, but



Figure 2 Right Goldmann Visual Field.





Figure 3 Left Goldmann Visual Field.

uninvestigated, family history and the observed phenotype makes the differential diagnoses of congenital abnormality related to choroidal inflammation, retinotoxic medication uses, infective, inflammatory, systemic metabolic or choroidal vasculopathy highly improbable.

Other causes of well-defined atrophy such as this occurs in choroideremia, gyrate atrophy, and bifocal choroidal atrophy. However, none of these are consistent with this case. In summary, we present a novel lobular chorioretinal dystrophy for discussion.

Reference

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There are no proprietary interests or research funding associated with this submission. The work has not previously been presented at a meeting

Eye (2006) **20**, 1390–1392. doi:10.1038/sj.eye.6702233; published online 3 February 2006

Sir,

Glutamate excitotoxicity in glaucoma: truth or fiction? By AJ Lotery

Lotery's editorial (Eye, April 2005) seeks to use the findings of Kwon *et al* as a platform to put forward the view that the role of glutamate in glaucoma is fictional. The editorial is disappointing because it is based