patients (1.78%) who received a more intensive steroid regime. We felt this pick-up rate justified continuing the review, unless alternative safeguards were introduced. To simply dispense with it would risk avoidable poor outcomes.

As Tan *et al.* suggest, early review, 4–6 hours after surgery, would allow detection of significant pressure spikes, and treatment at this stage would make more sense. Truly 'day case' surgery may improve uptake and make a national rate of 85% more attainable. Selection of 'low-risk' patients, e.g. excluding those with diabetes and glaucoma, for no early review could be an alternative.

Apart from detecting complications the first review also serves a number of other roles. It provides valuable feedback to the surgeon, especially trainees, allowing continued development of technique.

It also serves to reassure patients who in spite of our best efforts at pre-operative education and counselling are often unsure whether their first day symptoms are normal or a portent of impending disaster. For patients with complicated surgery an unexpected extra first day visit may add to dissatisfaction and anxiety.

Advances in surgical technique should certainly be seen as opportunities to re-evaluate traditional practices. However, enthusiasm for change should be tempered with caution to avoid compromising patient care.

*References*


1. Tan JHY, Newman DK, Klunker C, Watts SE, Burton RL. Phacoemulsification cataract surgery: is routine review necessary on the first post-operative day? Eye 2000;14:53–5.
2. Herbert EN, Gibbons H, Bell J, Hughes DS, Flanagan DW. Complications of phacoemulsification on the first post-operative day. Can follow-up be safely changed? J Cataract Refract Surg 1999;25:985–8.



E.N. Herbert, MA, FRCOphth ✉
St Paul's Eye Unit
8z Link
Royal Liverpool University Hospital
Prescot Street
Liverpool L7 8XP, UK


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Sir,

We would like to thank Herbert for his comments on the need for review on the first post-operative day after uncomplicated phacoemulsification cataract surgery.

The incidence of post-operative complications detected on the first day after uncomplicated phacoemulsification cataract surgery was low (2.2%) in our study.[1] Raised intraocular pressure (IOP) was the most common complication. This is a self-limiting complication that does not produce adverse sequelae in most eyes. However, transient elevation of IOP could be harmful in a small proportion of eyes with a susceptible optic nerve head (e.g. glaucoma). There may therefore be a role for reviewing such eyes on the first post-operative day. However, a more rational approach would involve reviewing patients on the day of surgery (after an interval of several hours) to enable early detection of raised IOP and prompt treatment.

A telephone-based post-operative review service would be a valuable supplement to pre-operative counselling. This would enable rapid access to the ophthalmic department for any patients who have worrying symptoms during the post-operative period. Post-operative uveitis requiring a more intensive steroid regime is likely to be symptomatic. No cases of iris prolapse occurred in our series.[1] Uncertain wound integrity is likely to be detected at surgery in such patients. These patients should be reviewed on the first post-operative day if wound suturing does not restore confidence in their wound integrity.

While feedback to trainees is important, this need not occur on the first post-operative day. This does not occur anyway for many day case procedures, such as squint surgery and oculoplastic surgery. It should be possible to create a system that allows trainees to review their post-operative phacoemulsification patients at a time determined by the patient's clinical need rather than trainee's convenience.

We maintain that the first day post-operative review after uncomplicated phacoemulsification cataract surgery can be withdrawn. However, steps should be taken to ensure that this is done safely and no patients are at risk of a poor visual outcome.

*Reference*


1. Tan JHY, Newman DK, Klunker C, Watts SE, Burton RL. Phacoemulsification cataract surgery: is routine review necessary on the first post-operative day? Eye 2000;14:53–5.



J.H.Y. Tan ✉
D.K. Newman
C. Klunker
R.L. Burton

Department of Ophthalmology
Leicester Royal Infirmary
Leicester LE1 5WW, UK
Tel: +44 (0)116 254 1414
Fax: +44 (0)116 258 5927


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Sir,

We read with interest the case report on 'Scleral dellen complicating primary pterygium excision' by Chen and Noonan.[1] We would like to recount our recent experience with a patient who developed a scleral dellen following primary pterygium excision and local steroid administration.

A 30-year-old Omani labourer presented with a 1 year history of recurrent irritation and watering in his left eye. But for the presence of a nasal pterygium in the left eye, ocular examination revealed no other abnormality. There was no evidence of dry eye. The pterygium was excised under local anaesthesia (benoxinate hydrochloride 0.4%) using the bare sclera technique and the patient was discharged on ointment Terra-Cortril (Pfizer: oxytetracycline hydrochloride 5.7 mg, hydrocortisone acetate 17 mg, polymyxin B 11 400 IU) q.i.d. One week later he presented with pain, redness and watering in the operated eye. Slit-lamp examination revealed a deep dellen on the bare sclera and surrounding conjunctival congestion; the ciliary body was visible through the thin sclera (Fig. 1).

Ointment Terra-Cortril was discontinued, ointment chloramphenicol was applied and the eye was patched for

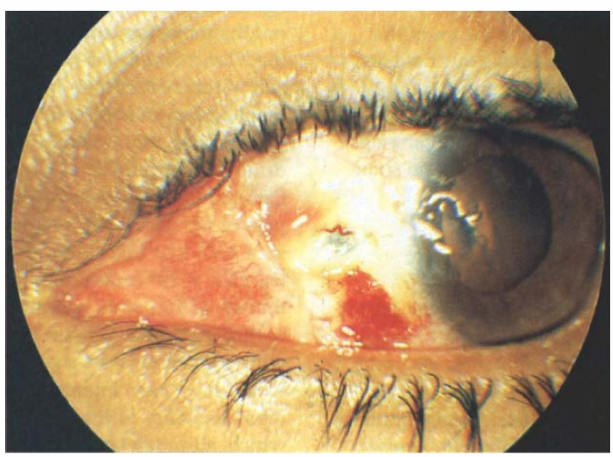

**Fig. 1.** *Scleral dellen as a complication of bare sclera excision of pterygium.*

24 hours. Subsequently, the patient was advised to use artificial tears 2 hourly and ointment chloramphenicol q.i.d. On the fourth day blood vessels were seen to approach the defect with partial filling up of the dellen; complete resolution was documented in the next 2 days.

Our patient had no features of collagen vascular disease. Chen and Noonan attributed formation of dellen to the heaped up granulation tissue. It is not clear from their report whether they had administered local corticosteroids following the pterygium surgery. We suggest that in addition to the aforementioned explanation, local corticosteroids could contribute to the occurrence of this complication. Topical steroids potentiate collagenase and inhibit collagen synthesis and wound healing.[2] It may, therefore, be advisable to monitor the use of steroids in the post-operative period following pterygium excision using the bare sclera method. Should the complication be encountered, conservative treatment with eye patching, antibiotic ointment and artificial tears may result in resolution of the dellen.

*References*


1. Chen S, Noonan C. Scleral dellen complicating primary pterygium excision. Eye 2000;14:100–1.
2. The Livostin Study Group. A comparison of topical levocabastine and oral terfenadine in treatment of allergic rhinoconjunctivitis. Allergy 1993;48:530–4.



Sandip Mitra ✉
Anuradha Ganesh
Radha Shenoy

Department of Ophthalmology
Sultan Qaboos University Hospital
PO-38
Muscat PC-123
Sultanate of Oman
Fax: +968 5 13009
e-mail: sandip@omantel.net.om


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Sir,

We thank Mitra *et al.* both for their interest in our report and for the addition of their case to the list of this complication, i.e. scleral dellen after non-adjunctive, bare sclera excision of primary pterygium.

In answer to their query about our use of local corticosteroids following surgery, oc. Betnesol-N is a proprietary drug containing betamethasone sodium phosphate 0.1% and neomycin sulphate 0.5%. The anti-inflammatory potency of betamethasone 0.1% (0.1 mg per 100 ml) is equivalent to 2.66 mg per 100 ml of hydrocortisone.[1] We accept their proposed pathophysiology of scleral thinning but also note that: (a) an intact epithelium excludes many of the offending collagenases and often tips the balance towards the healing phase,[2] and (b) tetracyline is a known inhibitor of collagenases.[3]

We accept that it is not possible to determine the exact pathophysiology of this complication without closer prospective evaluation. Nevertheless the report of this second case of scleral dellen complicating non-adjunctive, bare sclera excision of a primary pterygium supports our suggestion that conjunctival autografting be used as the first line of treatment for excision of primary pterygia.

*References*


1. Mehta DK. British national formulary. London: British Medical Association and Royal Pharmaceutical Society of Great Britain, September 2000.
2. Schwab IR. External disease and cornea. American Academy of Ophthalmology, 1994–5.
3. Schultz GS. Modulation of corneal wound healing. In: Krachmer JH, Mannis MJ, Holland EJ, editors. Cornea: fundamentals of cornea and external disease. St Louis: Mosby, 1997:183–98.



Sean Chen ✉
Carmel Noonan

Department of Ophthalmic Surgery
Warrington Hospital
Kendrick Wing
Lovely Lane
Warrington
Cheshire WA5 1QG, UK


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Sir,

I have read with interest the papers of Vernon[1] and Newman *et al.*[2] who both report retrospective studies upon ophthalmologic confirmation of referrals for suspected cases of glaucoma initiated by optometrists. Both studies present valuable data illustrating that best practice glaucoma screening uses the classic test triad: disc assessment, intraocular pressure (IOP) measurement and visual field evaluation.

However, similar negative findings reached by both investigations are worthy of comment. Both studies strongly conclude that visual field testing by optometrists either causes, or is associated with, unnecessary false positive referrals. This information conflicts directly with findings from large sample size prospective investigations in which visual field evaluation alone demonstrates higher discriminatory power than either IOP measurement or optic nerve head evaluation.[3,4] It is unfortunate that both papers fail to discuss this difference. It seems reasonable to suggest that the cause for this discrepancy may lie within the retrospective methodology of both studies, which does not permit strict control of data collection. Both studies appear to employ a definition of glaucoma based upon a single ophthalmologic assessment and presumably single visual field test, although this is not clearly stated in the methodology. Given that the earliest indication of glaucomatous loss of visual function with static achromatic perimetry is increased perimetric threshold variability,[5–7] use of single examination results are insufficient to make statements about referral accuracy. Within- and between-test variability typical of early disease may cause perimetric findings to alternate between apparent normality and focal loss: the Ocular Hypertension Treatment Study has shown that 85% of early defects were not confirmed on retest.[8] Use of a single field test result for ophthalmologic confirmation may thus lead cases of early normal tension glaucoma with normal structural appearance to be incorrectly labelled as false positive referrals. It is therefore interesting that Newman *et al.*[2] state that relatively few cases of normal tension glaucoma were detected in their study. Similarly cases of open angle glaucoma may also be misclassified if their optic nerve head structure appears normal: large, epidemiological studies have shown that for a single test session more than half of all glaucomatous eyes have IOP below 21 mmHg.[9]

Newman *et al.*[2] call for optometrists to adhere to a visual field testing protocol, which includes repeat testing of individuals who exhibit visual field defects prior to referral and also takes account of learning effects. Whilst this sentiment is applauded and a critically important message to send to optometric practitioners, their retrospective study methodology does not demonstrate that they have followed such a protocol, thereby creating an unfair double standard. Prior to making policy statements about optometric use of validated screening methodology, the authors should consider the drawbacks of their retrospective methodology and are obliged to include such consideration in a more balanced discussion of their findings.

*References*


1. Vernon SA. The changing pattern of glaucoma referrals by optometrists. Eye 1998;12:854–7.
2. Newman DK, Anwar S, Jordan K. Glaucoma screening by optometrists: positive predictive value of visual field testing. Eye 1998;12:921–4.