Histopathological findings in filtering blebs with recurrent blebitis

We report clinical courses and histopathological findings of excised blebs from two patients with recurrent blebitis.

Case 1

A 79 year old man with a past history of lung cancer underwent trabeculectomy with 5-fluorouracil in his right eye for a diagnosis of primary open angle glaucoma (POAG) in 1989. In January 1994, bleb leakage from an avascular bleb was confirmed for the first time and prophylactic topical erythromycin had been applied. In September 1994, he experienced ocular pain and hyperaemia in his right eye and blebitis was diagnosed. Culture of aqueous humour revealed Staphylococcus aureus. After keratoplasty and excision of the bleb, the infection resolved. After then, bleb leak was not observed at any regular visit. In March 1994, he experienced ocular pain and hyperaemia and blebitis was diagnosed. Culture from conjunctival scraping grew Staphylococcus aureus. The bleb leak persisted, however, because of his age. In August 1998, he visit the hospital for periodic examination and a lar bleb was observed but he was unable to explain it, "read eletters" on our homepage.

The editors will decide as before whether to also publish it in a future paper issue.

Histopathological findings in filtering blebs with recurrent blebitis

Histologic characteristics of filtering blebs in POAG: an audit of changing practice in district general hospitals: an

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The authors have no proprietary interest in the development and marketing of any products mentioned in this article.

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References


Retinal detachment surgery in district general hospitals: an audit of changing practice

Despite advances in the techniques of vitreoretinal surgery, rhegmatogenous retinal detachment (RRD) continues to pose a serious

Figure 1 (A) Recurrent blebitis in case 1. Note the infiltrates inside the avascular, transparent bleb. (B) The histological study of the excised bleb from case 1 shows a one to two layered thin epithelium with goblet cell depletion and a poor inflammatory response (haematoxylin and eosin stain, original magnification ×150).

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threat to vision. In the past, general ophthalmologists in the United Kingdom undertook most RRD surgery, with only the more "complex" cases being referred to retinal specialists. The recent trend towards subspecialisation has led to increasing numbers of primary RRD being managed by vitreoretinal surgeons in tertiary referral centres.1

We conducted an audit to determine the current success rate of primary RRD surgery in our subregion (south west subregion, SWSR). SWSR consists of the catchments of four district general hospitals (DGH) in Devon and Somerset (population 1.2 million). A previous subregional audit in 1991 showed that all consultant ophthalmologists undertook primary RRD repair, achieving a success rate of 71% with one operation. Since then, retinal subspecialisation has meant that all RRDs are managed by three retinal specialists (CJ, PS, RG) in their individual DGHs, providing a subregional surgical retinal service. An infor-
mal cross cover arrangement exists between the three DGHs, with the result that patients are very rarely referred out of the subregion. Case notes of all patients who underwent surgery for primary RRD from January to December 1999 were retrospectively reviewed. Case ascertainment was achieved by reviewing ophthalmology out clinic theatre logbooks and identifying all vitreoretinal procedures that took place during 1999. A single investigator (BL) collected details of all the patients; 1999 was chosen so that there was a minimum of 1 year follow up. Retinal reattachment was assumed to be stable in the absence of any history of further retinal surgery in the notes. The main outcome measures were: (1) primary success: retinal reattachment with one operation, with no re-intervention during follow up; (2) final success: retinal reattachment without or with further intervention during follow up, and (3) visual acuity outcome. The retrieval rate for case notes was 99%. A total of 153 cases (DGH A 36%, DGH B 41%, DGH C 23%) were treated in 1999, with a mean age of 59.6 years (range 14–95). Table 1 shows the characteristics of the retinal detachments at presentation. There was no significant difference in any of the characteristics listed in Table 1 between the three DGHs (χ2 test, p>0.05). A total of 102 (80%) patients were operated on within 48 hours of presentation. Detachment subtypes in the 20% of operations delayed for more than 48 hours included chronic macula-off detachments, chronic inferior detachments with atrophic holes (eight), chronic dialyses (three), and inferior combined schisis detachments (one). No patients with macula-on detachment developed macular detachment before surgery. Overall, 74 (58%) cases had primary vitrectomy. The three DGHs differed significantly in their individual primary success rate (DGH A 87%, DGH B 40%, DGH C 79%). Consultants performed 85% of all operations, while trainees performed the remainder under supervision. Observations

The primary success rate of retinal reattachment was 85% overall, with a mean of actual documented follow up of 8.2 months (2–25 months). This is a significant improvement from the 71% primary success in 107 cases of primary RRDs in the previous subregional audit (p<0.05, χ2 test). There was no signifi-
cantly different difference between the three DGHs in their individual primary success rate (DGH A 87%, DGH B 85%, DGH C 83%). Included in the primary success were three vitrectomy/oil cases that had not undergone oil removal at final follow up. There were 19 (15%) primary failures. Eleven were "early failures" (mean interval to reattachment 8 days) whose retinas did not reat-
tach, or immediately redetached after absorp-
tion of gas tamponade. They were due to inadequate retinopexy/adhesion (five), new/missed breaks (four), inadequate buckle (one), and proliferative vitreoretinopathy (one). In contrast, the eight “late failures” (mean interval to redetachment 69 days) all had successful initial reattachment, but sub-
sequently redetached due to proliferative vitreoretinopathy. Logistic regression with success or “late failures” as the dependent variable found retinal break in a superior position (from 10 to 2 o’clock), myopia >6 dioptres, and “aphakia/pseudophakia without an intact posterior capsule” to be signifi-
cantly different from the 93% of the previous audit (p<0.05, χ2 test). A total of 15 primary failures underwent further retinal surgery; 14 patients were reat-
tached with one further operation (one needed two further procedures). The final success rate was 97%. This was not significa-
cantly different from the 93% of the previous audit (p>0.05, χ2 test). Table 2 summarises the visual outcome of our patients, represented by changes in logMAR visual acuity. Visual acuity was significantly improved in the primary success, macula attached and macula detached sub-
groups (p<0.05, the Wilcoxon test). Seventy per cent of primary success patients achieved a Snellen acuity of 6/18 or better at discharge.

Comment

In 1991, all consultant ophthalmologists in our subregion undertook primary RRD sur-
gery, each managing on average 8.2 cases per year. In the current audit cycle, the caseload had increased to 42 cases per consultant, with three retinal specialists managing all the RRD. Assuming there was no significant change in the detachment case mix between 1991 and 1999, the improvement in the primary success rate is most likely to be associated with the advent of vitreoretinal subspecialisation.2 Results of RRD surgery from three vitreoretinal units (VRU) in the United Kingdom1 1 provided indicators for compari-
sion. With the exception of pseudophakic rate (Cambridge 12%, SWSR 24%), our case mix was most comparable to the Cambridge subregion, with both series describing RRD from geographically well defined populations. Initially, there would appear to be significant differences in the primary success rate be-
tween the four studies (Cambridge VRU 90%, SWSR 85%, St Thomas’s 84%, Moorfields 80%, p<0.05, χ2 test). However, it is debatable whether retinal reattachment achieved with silicon oil in situ can be considered “stable.” After excluding eyes with silicon oil still in situ, the “oil-out primary success rate” was comparable (Cambridge VRU 80%; SWSR 83%, p<0.05, χ2 test).

The primary success rate, although signifi-
cantly improved, was not 100%. Improvement on our “early” failures, mostly due to “techni-
cal” errors, can be achieved by appropriate choice of surgical technique. For the “late” failures, all consequence of PVR, improve-
mament may depend on the identification of “at-
risk” cases, and the selective use of an “anti-
PVR cocktail.”

To conclude, we have shown that the primary success rate of RRD surgery has improved following a change in practice towards retinal subspecialisation in our sub-
region. The anatomical success and functional outcome were comparable to results from other VRUs in the United Kingdom.1 1 The benefits of providing a local vitreoretinal serv-
ice, in contrast to referring patients to a VRU in a tertiary centre, include prompt on-site surgical access, and the availability of support from family and friends locally to aid visual rehabilitation in the postoperative period.

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Table 1 Characteristics of primary RRD in the south west subregion during 1999

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>No (%) of retinal detachments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macula attached</td>
<td>60 (47)</td>
</tr>
<tr>
<td>Phakic</td>
<td>97 (78)</td>
</tr>
<tr>
<td>&gt;6D myopia</td>
<td>33 (26)</td>
</tr>
<tr>
<td>Single retinal break</td>
<td>72 (57)</td>
</tr>
<tr>
<td>Inferior retinal breaks*</td>
<td>29 (23)</td>
</tr>
<tr>
<td>PVR (grade C1 or worse)</td>
<td>6 (5)</td>
</tr>
<tr>
<td>Total retinal detachment</td>
<td>11 (9)</td>
</tr>
</tbody>
</table>

Types of retinal breaks:
- Horseshoe tears: 83 (65)
- Round holes: 22 (17)
- Dialysis: 8 (6)
- Combined schisis detachment: 3 (2)
- Giant tear: 3 (2)

PVR = proliferative vitreoretinopathy.
*One in the 4 clock hours from 4 to 8 o’clock.

Table 2 Preoperative and postoperative logMAR visual acuity

<table>
<thead>
<tr>
<th></th>
<th>Preop Median (SD)</th>
<th>Postop Median (SD)</th>
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<tbody>
<tr>
<td>Overall (n=127)</td>
<td>0.78 (0.88)</td>
<td>0.18 (0.65)*</td>
</tr>
<tr>
<td>Macula attached (n=60)</td>
<td>0.21 (0.62)</td>
<td>0.16 (0.35)*</td>
</tr>
<tr>
<td>Macula detached (n=67)</td>
<td>1.83 (0.90)</td>
<td>0.85 (0.65)*</td>
</tr>
<tr>
<td>Primary success (n=108)</td>
<td>0.60 (0.88)</td>
<td>0.18 (0.54)*</td>
</tr>
<tr>
<td>Primary failures following successful reintervention (n=13)</td>
<td>0.78 (0.90)</td>
<td>0.60 (0.99)</td>
</tr>
</tbody>
</table>

*p<0.05, Wilcoxon test.

1. T o conclude, we have shown that the primary success rate of RRD surgery has improved following a change in practice towards retinal subspecialisation in our subregion. The anatomical success and functional outcome were comparable to results from other VRUs in the United Kingdom. 1 1 The benefits of providing a local vitreoretinal service, in contrast to referring patients to a VRU in a tertiary centre, include prompt on-site surgical access, and the availability of support from family and friends locally to aid visual rehabilitation in the postoperative period.

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References


Do climatic variables influence the development of posterior vitreous detachment?

Posterior vitreous detachment (PVD) is a common condition after the fifth decade of life.1 Synchysis of the vitreous progresses in proportion to age, creating holes in the posterior hyaloid membrane and allowing PVD to occur.2 The incidence of rhegmatogenous retinal detachment is generally accepted to be season dependent, with a higher incidence in the summer months.3,4 However, there is no evidence that PVD is season dependent. We performed this study to determine whether there is a correlation between ambient temperatures, humidity, or solar radiation on the incidence of PVD.

Case report

Patients were selected for this study from the eye casualty database at Oxford Eye Hospital. All patient records, which have been diagnosed with PVD, were included in the study. Of these, 319 (53%) were referred by general practitioner, 63 years (range 36–89 years). Of these, 319 (53%) were referred by general practitioner, 63 years (range 36–89 years). All patient records, which have been diagnosed with PVD, were included in the study.

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Surgical histology, >90% of the fibrin clot had improved. Despite the ominous proptosis was noted. Despite the ominous decompressed through the open corneal ulcer inflammatory clot, the anterior descemetocele posteriorly.

The fibrin clot was integrated with descemetocele and near total corneal infiltration, affording only a hazy view of the peripheral iris. The fibrin clot was integrated with the central iris, and the lens was not visible. Ultrasonography suggested anterior segment involvement only. Posaconazole (SCH-56592), an investigational broad spectrum triazole, was obtained from Schering-Plough Research Corporation and administered at 200 mg four times daily orally, with hourly topical ocular application of the same suspension (10 mg/0.1 ml). A compassionate use investigative new drug (IND) approval for topical ocular application of posaconazole was requested from, and promptly issued by, the Federal Drug Administration, and informed consent was obtained through an institutional review board approved protocol. Treatment commenced 5 September 2000, when aqueous tap reconfirmed presence of Fusarium, which was susceptible in vitro to posaconazole.

Within the first week of 2 hourly topical application of posaconazole oral suspension (100 mg/ml), along with 800 mg orally of the triazole, was obtained from Schering-Plough for providing the study drug and protocol for the safety and efficacy of SCH 56592 (posaconazole), a new triazole antifungal agent, as requested by Gilbert Viprao in coordinating this study, and members of the multidisciplinary team.

The authors have no proprietary interest in any of the drugs described in this study. This study was supported in part by an unrestricted grant from Research to Prevent Blindness, New York, USA. The authors have no proprietary interest in any of the products used in this assessment.

In summary, a healthy woman with amphotericin and natamycin resistant Fusarium spp keratitis, progressing to invasive endophthalmitis, recovered with good retinal function via an apparently rapid response of the Fusarium to systemic and/or topical posaconazole. The ocular penetration of posaconazole was confirmed on separate occasions by aqueous and vitreous analysis.

Acknowledgements


The authors gratefully acknowledge the assistance of Gilbert Viprao in coordinating this study, and Schering-Plough for providing the study drug and funding for Mrs. Viviani. Supported in part by an unrestricted grant from Research to Prevent Blindness, New York, USA. The authors have no proprietary interest in any of the products used in this assessment.

World Sight Day and cataract blindness

Age related cataract remains the major cause of blindness throughout the world. It is estimated that the present number of 20 million of cataract blind will double by the year 2020. The main reasons for low uptake of cataract surgery in developing countries are poor surgical outcome and high cost. Various strategies have been suggested by the global initiative “Vision 2020: the right to sight” to reduce cataract blindness.

In Nepal, on “World Sight Day,” Lahan Eye Hospital and Tilganga Eye Centre jointly conducted a one week cataract surgical “workshop” from 8–13 October 2001. A total of 1542 patients with operable cataract were identified in 49 screening camps in rural areas of south east Nepal and transported to Lahan Eye Hospital. During 6 days 2292 eye operations were performed, of which 2167 were cataract extractions (range 286–594 per day).

The operations were performed by six experienced eye surgeons using a sutureless non-phaco technique, removing the nucleus...
through a self sealing corneoscleral tunnel. Biometry was performed and a calculated PC IOL inserted in 374 (18%) cases; the remaining 1741 (82%) received a +22 dioptre PC IOL.

After excluding 23 cataract operations on children, 21 combined glaucoma procedures, and eight lens induced glaucoma surgeries, the surgical outcome on the remaining 2115 cataract extractions was evaluated.

The uncorrected visual acuity at discharge (94% on first postoperative day) was 6/6-6/18 in 49.9% and less than 6/60 in 3.0% of eyes (Table 1). The reasons for poor outcome are shown in Table 2.

Table 1  Uncorrected visual acuity at discharge

<table>
<thead>
<tr>
<th>Acuity</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/6-6/18</td>
<td>1054</td>
<td>49.9</td>
</tr>
<tr>
<td>&lt;6/18-6/60</td>
<td>997</td>
<td>47.1</td>
</tr>
<tr>
<td>&lt;6/60</td>
<td>64</td>
<td>3.0</td>
</tr>
</tbody>
</table>

The cost of consumables including IOL, medicines, anaesthesia, viscoelastic, irrigation solution, disinfectant, and dressings was less than $10 per cataract operation.

Well organised cataract screening camps combined with efficient base hospital surgery, using a safe surgical technique which provides early and good visual outcome, can be a strategy to reduce the backlog of cataract blindness in rural communities in developing countries.

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References

“No-needle” sub-Tenon’s anaesthesia

We read with interest the letter from Amin et al, suggesting a modification of the sub-Tenon local anaesthetic injection procedure. They advocate the use of a Venflon needle to penetrate the conjunctiva, with subsequent advancement of the cannula before anaesthetic injection. We are concerned that the use of a sharp needle should be recommended so close to the eye. Amin et al point out that the needle tip is clearly visible at all times and therefore at “minimal risk” of puncturing the eye. However, once under the conjunctiva, the needle is not necessarily “clearly” visible, and subconjunctival haemorrhage should occur then it will quickly become obscured. We do not think it sensible to place a sharp needle this close to the eye when an effective and well proven alternative delivery system has already stood the test of time.

In his editorial on local anaesthetic injection techniques for cataract surgery, Smerdon rightly emphasises the risk of ocular penetration for all techniques involving needles, and highlights the Royal College of Ophthalmologists’ local anaesthesia survey which demonstrated the relative safety of sub-Tenon’s and topical anaesthesia. We agree with him that when discussing anaesthetic techniques with a potential for high volume, it is not the expert anaesthetist/ophthalmologist who should be borne in mind, but rather the less skilled person, possibly less familiar with ophthalmic anaesthetic techniques, or in training, who may be required to administer a block. It is in this setting that the use of a needle very close to the eye is, in our opinion, an unwarranted risk. Surely the “no needle” sub-Tenon’s technique is just as effective, and safer.

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References

Trachoma and recurrent trichiasis

It was with great interest that I read the recent article by al Arab and co-workers. This work clearly shows that endemic blinding trachoma continues to be a major health problem in this area of the Nile Delta, quite close to Cairo.

My attention was particularly drawn to the high rate of recurrence among those who had had trichiasis surgery. Overall, 44% of cases who had had surgery had recurrent trichiasis. It would be most interesting to look at the time that had elapsed between surgery and time of examination. Some have argued that the recurrence rate from trichiasis reflects poor or inadequate surgery. Others have alluded to the fact that the tarsal trichiasis is of a progressive nature and that trichiasis is likely to recur because of ongoing scarring, even after otherwise successful surgery. Information of the elapsed time would help explore the scenario.

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Table 2  Reasons for poor visual outcome at discharge (<6/60)

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-existing eye disease</td>
<td>34</td>
<td>1.6</td>
</tr>
<tr>
<td>Surgical complication</td>
<td>25</td>
<td>1.2</td>
</tr>
<tr>
<td>Refractive error</td>
<td>4</td>
<td>0.2</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>3.0</td>
</tr>
</tbody>
</table>

MAILBOX

Failure of amniotic membrane transplantation in the treatment of acute ocular burns

We read with interest the article by Joseph et al. It is to be appreciated that they have the courage to report the negative results of their study along with the need of an upgraded classification for the chemical burn. The authors must be congratulated for highlighting the pitfalls of amniotic membrane transplantation (AMT) in acute cases with sufficient scientific explanation.

Whenever a new technique is described it is aggressively followed without realising the consequences. The authors have very rightly suggested that the most important strategy for the management of thermal and chemical burns in the acute stage is to reduce inflammation, promote reepithelisation of the cornea and subsequent healing of the conjunctiva. It is reported in the literature that AMT does help in all these three conditions at the acute stage of burns for which the procedure is advocated, but when used at a later stage? It is essential to have some amount of healthy conjunctival tissue for graft to take up. Further, rather than performing the AMT at the acute stage, there should be some time lag between burn and surgery to help to reduce inflammation, thus allowing the surgeons to perform an elective surgery. Regarding the stage of the chemical burn, the authors have rightly pointed out that there is a remarkable limitation in modified Roper Hall’s classification at grade IV. To do the eyes with 100% limbal ischaemia behave in the same way as those with 55% ischaemia?

It was thought of back in 1984 and a modified classification was suggested in these eyes before keratoplasty as a prognostic factor. However, the same factor was restricted to healed lesions and now the time has come for the author to consider this problem.

Once again we would like to commend the authors for their boldness and wonder how many other corneal surgeons would have felt the same.

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References

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Role of autologous serum in persistent epithelial defects

Poon et al in their excellent article have reiterated the efficacy of autologous serum in the treatment of persistent epithelial defects (PEDs) of the cornea. We would like to invite the authors of the article to certain aspects of the study.

The authors have considered a period of 1 week for labelling an epithelial defect to be persistent. However, most studies on a similar subject have taken the criterion to be 2 weeks. It is generally recommended that a "washout" period of at least 2 weeks be given with preservative free artificial tears and only those epithelial defects that remain either static or demonstrate an increase in size in this period be included in the study. The authors have not mentioned such a washout period in the protocol. When using autologous serum drops most investigators have not used any other therapeutic modality at the same time to enhance epithelialisation, apart from preservative free lubricants. The use of therapeutic contact lenses in five cases by the authors makes it difficult to evaluate the actual contribution of serum drops in the healing of the epithelial defect in these cases. Further, the use of serum drops in the immediate postoperative period in two patients with poor ocular surface undergoing keratoplasty without waiting for the corneal epithelial defect to heal by itself cannot be extrapolated to make a comment on the beneficial effect of autologous serum. Also, the authors have not mentioned the absolute measure of surgical success left on its further translation was the only product of vector analysis, indeed vector analysis would be a limited tool. This seems to be Morlet et al's contention. This is far from the truth and as a result the conclusion that "vector analysis does not give a measure of surgical success leaves the assertion unsupported and lacking credibility. If the surgical induced astigmatism vector (SIA) (and its further translation) was the only product of vector analysis, indeed vector analysis would be a limited tool. This seems to be Morlet et al's contention. This is far from the truth and as a result the conclusion that "vector analysis does not give a measure of surgical success leaves the assertion unsupported and lacking credibility. If the surgical induced astigmatism vector (SIA) (and its further translation) was the only product of vector analysis, indeed vector analysis would be a limited tool. This seems to be Morlet et al's contention. This is far from the truth and as a result the conclusion that "vector analysis does not give a measure of surgical outcome" (p 1134) is factually inaccurate.

In addition, their interpretation that the off-axis effects of treatment at 45° to the surgical plane (other than the refraction) would result in "torque, the component of the SIA that has been ineffective in reducing astigmatism. The relevant reference describing flattening, steepening, torque, and effect of off-axis treatments has been omitted from the attempt at a comprehensive list of relevant published material. The phenomena of rotation and torque are fundamentally different physical processes. The polar value at 45° to the "surgical plane" (p 1131) quantifies the torque which causes an increase in the existing astigmatism associated with its change in orientation. It does not properly gauge the cylindrical effect as it does not account for the concurrent change in the amount of existing astigmatism. Rotation includes some associated flattening (or steepening) effect occurring as a result of the SIA. The article's conclusion that "a better description of the effect of astigmatism correction requires the use of the "by the rule" or mirror equivalent axis notation, or by a manual scoring method to produce an outcome summary measure" (p 1134) is convoluted and unworkable. If implemented this would adversely affect the comprehension of astigmatism outcome analysis by the average general ophthalmic or refractive surgeon. It is unfortunate the reviewers of this paper did not direct the authors to the many fallacies that merited revision. The statement "vector analysis is only valid in the early postoperative period" because "the healing response has modified the inherent astigmatic surgery" (p 1131) shows the authors' failure to understand that the healing response cannot be divorced from the surgical process. It is part of it. The amount of astigmatism correction (MTA) achieved is a measure of trends over time when examining aggregate data, and this phenomenon requires surgeons to examine outcomes facilitating adjustment of nomograms based on long term (at least 6 months) and not immediate outcomes. The later statement "the use of vector analysis over time is conceptually invalid, because unlike the initial surgical event, the wound healing process is continuous" (p 1132) is seriously flawed. Vector analysis is an essential component of this refinement process. In fact, vector analysis could be used to determine the astigmatic effect of the healing process itself by comparison of data at various stages in the postoperative period.

The recommendations promoted by Morlet et al introduce greater complexity and add an already complicated subject. For example, mix negative and positive cylinder notation is unnecessary. The technique put forward (p 1131 and equation 20) does not address the changes that occur in corneal shape measured by keratometry and topography, and cannot be readily applied when targeting non-zero goals associated with incomplete or off-axis refractive astigmatism treatment.

It is probable that the authors are careless in raising phantom "problems" (p 1128) for planning techniques based on incorrect quoting of information (such as reference 33). The merits of this customised treatment technique are that refractive as well as keratometric data are employed (contrary to its misrepresentation that the technique "only uses keratometric data for the planning of refractive surgery" (p 1128)).

Morlet et al's unfortunate statement of opinion that "a lack of critical evaluation" has resulted in the surgical vector being adopted as the de facto standard used in most reports concerning the surgical management of astigmatism (p 1132) is not shared by many experienced investigative surgeons in the field. This has been shown by its admitted prevalence by the authors, and the usefulness of vectorial analysis in understanding the surgical process. Indeed, many of the erroneous statements and omissions in the Perspective article might lead one to ask where the "lack of critical evaluation" actually lies.

References


BOOK REVIEW


This text provides an illuminating and unique insight into the entoptic phenomena induced by the development of age related macular degeneration. Written primarily by a distinguished ophthalmic artist and photographer, it records his visual impressions of the development of age related macular degeneration in his own retinas during a 10 year period. His method of inducing and illustrating his entoptic phenomena is fascinating and the correlation with the clinical fundus findings of his attending ophthalmologists is quite remarkable. The effect of laser photocoagulation is clearly described from a patient’s perspective.

This book is written in large print for the lay sufferer and ophthalmic professional alike. It is an easy read with plentiful illustrations and should occupy the bookshelf of all concerned with this potentially blinding disorder. Profits derived from the sale of this book will be used to support age related macular degeneration research.

R McFadzean
Department of Neuro-ophthalmology, Institute of Neurological Sciences, Glasgow, UK

NOTICES

Childhood blindness

The latest issue of Community Eye Health (No 40) discusses new issues in childhood blindness, with an editorial by Claire Gilbert, senior lecturer at the International Centre for Eye Health. For further information please contact: Journal of Community Eye Health, International Centre for Eye Health, Institute of Ophthalmology, 11–43 Bath Street, London E1J V 9EL, UK (tel: +44 (0)20 7608 6910; fax: +44 (0)20 7250 3207; email: eyeresource@ucl.ac.uk; website: www.jceh.co.uk). Annual subscription (4 issues) UK£25; US$40. Free to workers in developing countries.

International Centre for Eye Health

The International Centre for Eye Health has published a new edition of the Standard List of Medicines, Equipment, Instruments and Optical Supplies (2001) for eye care services in developing countries. It is compiled by the Task Force of the International Agency for the Prevention of Blindness. Further details: Sue Stevens, International Centre for Eye Health, 11–43 Bath Street, London EC1V 9EL, UK (tel: +44 (0)20 7608 6910; email: eyeresource@ucl.ac.uk).

Second Sight

Second Sight, a UK based charity whose aims are to eliminate the backlog of cataract blind in India by the year 2020 and to establish strong links between Indian and British ophthalmologists, is regularly sending volunteer surgeons to India. Details can be found at the charity website (www.secondsight.org.uk) or by contacting Dr Lucy Mathen (lucymathen@yahoo.com).

Specific Eye Conditions (SPECS)

Specific Eye Conditions (SPECS) is a not for profit organisation which acts as an umbrella organisation for support groups of any conditions or syndrome with an integral eye disorder. SPECS represents over fifty different organisations related to eye disorders ranging from conditions that are relatively common to very rare syndromes. We also include groups who offer support of a more general nature to individuals affected by retinitis pigmentosa. Part of the welfare service, help members and their families with the everyday concerns caused by retinitis pigmentosa. Part of the welfare service is the telephone helpline (+44 (0)1280 860 363), which is a useful resource for any queries or worries relating to the problems retinitis pigmentosa can bring. This service is especially valuable for those recently diagnosed with retinitis pigmentosa, and all calls are taken in the strictest confidence. Many people with retinitis pigmentosa have found the Society helpful, providing encouragement, and support through the Helpline, the welfare network and the BRPS branches throughout the UK. (tel: +44 (0)1280 821 334; email: lynda@brps.demon.co.uk; website: www.brps.demon.co.uk)

The British Retinitis Pigmentosa Society

The British Retinitis Pigmentosa Society (BRPS) was formed in 1975 to bring together people with retinitis pigmentosa and their families. The principle aims of BRPS are to raise funds to support the programme of medical research into an eventual cure for this hereditary disease, and through the BRPS welfare service, help members and their families with the everyday concerns caused by retinitis pigmentosa. Part of the welfare service is the telephone helpline (+44 (0)1280 860 363), which is a useful resource for any queries or worries relating to the problems retinitis pigmentosa can bring. This service is especially valuable for those recently diagnosed with retinitis pigmentosa, and all calls are taken in the strictest confidence. Many people with retinitis pigmentosa have found the Society helpful, providing encouragement, and support through the Helpline, the welfare network and the BRPS branches throughout the UK. (tel: +44 (0)1280 821 334; email: lynda@brps.demon.co.uk; website: www.brps.demon.co.uk)

Singapore National Eye Centre 5th International Meeting

The Singapore National Eye Centre 5th International Meeting will be held on 3–5 August 2002 in Singapore. Further details: Ms Amy Lim, Organising Secretariat, Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751 (tel: (65) 322 8374; fax: (65) 227 7290; email: Amy_Lim@sne.com.sg).

Ophthalmic Anesthesia Society (OAS) 16th Scientific Meeting

The 16th Scientific Meeting of the OAS will be held on 4–6 October 2002 in The Westin, Michigan Avenue, 909 North Michigan Avenue, Chicago, USA (reservations +1 800 228 3000). Further details: OAS, 793-A Foothill Blvd, PMB 110, San Luis Obispo, CA 93405, USA (tel: +1 805 771 8300; web site: www.eyeanesthesia.org).

BEAVRS Meeting

The next BEAVRS meeting will be held in the Dalmahoy Hotel near Edinburgh on 31 October to 1 November 2002. Further details: Susan Campbell, Medical Secretary, Gartnavel General Hospital (email: susan.j.campbell@northglasgow.scot.nhs.uk).
Ocular and systemic posaconazole (SCH-56592) treatment of invasive *Fusarium solani* keratitis and endophthalmitis

W E Sponsel, J R Graybill, H L Nevarez and D Dang

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