

assumptions, and they are generally robust against problems like outliers and non-constant variances. The authors tested statistical significance by the Kruskal-Wallis test, a non-parametric procedure that is a K-sample generalisation of the two sample rank sum test (also called the Mann-Whitney U test). It tests the null hypothesis of identical group medians, rather than means. With the data available in this report, the authors should have noticed that figures 1 and 2 show means and standard deviations; they should instead have shown group medians. Moreover, their results should have been expressed as medians.⁴ It also remains unclear how many assays were performed. By looking at figures 1 and 2, it seems that three assays were done each time but somehow they were done in duplicate. This is important to show the real sample size that was used to compute the estimates.

The pellet resuspension with 0.9 ml of BSS in the centrifugation technique appeared in their final recommendation at the end of the paper. However, the authors stated in the methods section that the pellet was resuspended with 1 ml of BSS. This point needs to be explained.

I recommend that the authors clarify the above mentioned issues. I also suggest that they learn the golden rule of fair use of another author's protected material: take from someone else only what you wouldn't mind someone taking from you.

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The author does not have commercial interest in any product mentioned in the manuscript.

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PHEMA as a keratoprosthesis material

An aim to provide an optimised keratoprosthesis, with excellent biointegration, and all other properties meeting ideal requirements, is one we share with Mehta *et al*.¹ However, their paper includes some points that require clarification.

PHEMA (poly(2-hydroxyethyl methacrylate)) is a non-toxic polymer of the toxic monomer HEMA, though cytotoxicity is still possible if non-reacted monomer has not been fully removed. The "polyhydroxyethyl methacrylate" the authors obtained for their study was not fully described, and may have

been contact lens blanks, unlikely to have been processed for "implantable quality." Whether the samples had been fully extracted was not stated, nor was the hydration of the samples when used for the study. Contact lens blanks are not designed for cell adhesion and the results of this study, with regard to PHEMA, are entirely predictable and have been previously reported.

The commercially available keratoprosthesis AlphaCor is made from a form of PHEMA, specifically modified for its intended purpose within the cornea. In particular, the AlphaCor OPTIC is made from a relatively low water content, but hydrated, microporous form, similar to the samples evaluated by the authors, specifically because it does not encourage cellular adhesion (epithelial coverage is not desired for this model, nor would adherent posterior cells and membranes be desirable).

In contradistinction, the biointegratable SKIRT region of AlphaCor is made from a macroporous form of PHEMA with a very high water content; this material, with its interconnecting channels, has been optimised to promote viable biocolonisation, which has been extensively described in the literature. Mehta *et al* do concede that cells "may behave differently in colonising a 3-D porous keratoprosthesis skirt": indeed they do. Further, very subtle modifications of the sponge structure significantly affect all aspects of biointegration.

Both early trial results, such as the preliminary cases cited by Mehta *et al*, and current results for over 250 AlphaCor devices, have been extensively presented and made available to all device users. Histology now available from AlphaCor devices explanted from human recipients confirms that the biointegration process in humans is similar to that previously shown in the animal model, and maintained in the long term. As expected, specific inflammatory processes can cause localised reversal of biointegration in areas of stromal melting. Certainly, porosity itself does not prevent melting processes, as is also seen in relation to hydroxyapatite keratoprostheses and orbital implants.

There is no argument that keratoprosthesis materials and design require ongoing revision and improvement. The authors' findings in relation to hydroxyapatite are interesting although, as they note, this rigid material has its own limitations. Novel approaches are undergoing early evaluation and may offer benefits. However, at present, in our view, AlphaCor is a device worthy of consideration for those in whom a donor graft would fail.

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CH is medical director of CooperVision Surgical, manufacturer of AlphaCor. The Biomaterials and Polymer Research Department of the Lions Eye Institute has a financial interest in CooperVision Surgical through support of departmental funding, travel, and research.

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Expression of TSH-R in normal human extraocular muscles

We read with interest the paper published by Boschi *et al*,¹ in which immunohistochemistry was performed on orbital tissues from patients with thyroid associated ophthalmopathy (TAO) and compared with non-diseased orbital tissue.

Our laboratory recently reported positive TSH receptor staining within normal human muscle fibres, using one of the same antibodies (3G4) as Boschi *et al* (supplied by Costagliola) and a commercial antibody (3B12).²

Our findings differ from Boschi *et al*'s as no staining of the muscle fibres was visible in their experience.

Assessing the techniques used suggested some possibilities as to why our findings differ. Our paraffin embedded tissues were subjected to a proteolytic antigen retrieval step, as commonly used in avidin-biotin staining.³ The reason for this is that formalin used in fixation is notorious for altering protein immunoreactivity, and hence masking protein expression.^{4,5}

Moreover, the amplification immunohistochemistry kit used in our experiments is possibly more sensitive than conventional immunohistochemistry used in the experiments of Boschi *et al*.⁶

We do not dispute the finding that TSH-R expression is elevated in orbital connective tissue of diseased patients. Combined with our findings, Boschi *et al*'s paper also suggests that expression of TSH-R on normal muscle fibres is lower than in the connective tissue of diseased patients. Boschi *et al* have successfully produced more evidence that connective tissues in the orbit are active in TAO affected patients; however, the potential role of the extraocular muscle in the pathogenesis of TAO should also be considered.

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Trabeculotomy versus trabeculotomy-trabeculectomy for congenital glaucoma

The article by Al-Hazmi *et al*¹ states that combined trabeculotomy-trabeculectomy with mitomycin C (CTTM) gave better results than trabeculotomy alone for primary congenital glaucoma (PCG) at the King Khaled Eye Specialist Hospital (KKESH) in Riyadh, Saudi Arabia, between 1982 and 2002. For moderate PCG the success rate is stated as 40% and 80% for trabeculotomy and CTTM, respectively. For severe PCG the stated success rate is 10% and 70% for trabeculotomy and CTTM, respectively. However, without more specific information regarding when the trabeculectomies were performed at KKESH, the authors cannot advocate CTTM over trabeculotomy for moderate and severe PCG.

As the article states, over the years at KKESH the success rate for trabeculotomy for PCG dramatically improved (29% from 1982-90; 47% from 1991-4; 82% from 1995-2002). The authors attribute these improved results over the years to improved primary health-care facilities within the kingdom, earlier referrals, better equipment availability, and surgeons becoming more adept at surgical intervention. In contrast, CTTM for PCG was first performed at KKESH in 1994 with less of a "learning curve"; the success rate from 1994-2002 was 72%. The complication rate, however, was higher for CTTM than for trabeculotomy.

Because initial trabeculotomy success for PCG at KKESH has dramatically increased with time, it is important to know how many of the reported trabeculotomy failures for moderate and severe PCG were from the earlier periods in the hospital. This information was not in the paper. It may be that trabeculotomy as currently performed at KKESH for moderate and severe PCG has a success rate similar to that of CTTM for the same patient population with fewer surgical complications.

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CORRECTIONS

doi: 10.1136/bjo.2005.66431corr1

The letter titled, Bevacizumab suppresses choroidal neovascularisation caused by pathological myopia (*Br J Ophthalmol* 2005;**10**:1368-87), was previously published online at <http://bjo.bmjournals.com/cgi/content/full/89/6/e1>.

doi: 10.1136/bjo.2005.68171corr1

In the paper titled, The achiasmia spectrum: congenitally reduced chiasmal decussation (*Br J Ophthalmol* 2005;**89**:1311-17), one of the authors names has been misspelt. The correct list of authors is, D A Sami, D Saunders, D A Thompson, I M Russell-Eggitt, K K Nischal, G Jeffrey, M Dattani, R A Clement, A Liasis, D S Taylor. The journal apologises for this error.

doi: 10.1136/bjo.2005.bj75184corr1

In the letter titled, Two novel mutations of connexin genes in Chinese families with autosomal dominant congenital nuclear cataract (*Br J Ophthalmol* 2005;**11**:1535-6), the authors have been listed incorrectly. The correct listing is, Z W Ma, J Q Zheng, J Li, X R Li, X Tang, X Y Yuan, X M Zhang, H M Sun.

doi: 10.1136/bjo.2005.bj82453corr1

In the mailbox item titled, TTT: local light absorption and heat convection versus heat (*Br J Ophthalmol* 2005;**11**:1544-5), the second author's name has been misspelt. The correct spelling is D H Sliney. The journal apologises for this error.

doi: 10.1136/bjo.2005.bj74468corr1

In the letter titled, Confocal microscopy of the cornea in nephropathic cystinosis (*Br J Ophthalmol* 2005;**89**:1530-1), the order of the authors is incorrect. The correct order is A H Alsuhaibani, A O Kahn, M D Wagoner. The journal apologises for this error.

NOTICES

World Ophthalmology Congress 2006 – Brazil

The World Ophthalmology Congress (which is replacing the International Congress of Ophthalmology) is meeting in February 2006 in Brazil.

For further information on the congress and committees, scientific program and coordinators of different areas are available at the congress website www.ophthalmology2006.com.br

19th International Society for Geographical & Epidemiological Ophthalmology Congress

The 19th ISGEO congress will be held in Sao Paulo, Brazil on 18-19 February, 2006, just prior to the ICO. Abstract submission and registration forms can be obtained by emailing Dr Paul Courtright (pcourtright@kcco.net) or by accessing the ISGEO website at www.kcco.net/isgeo.

EYE INJURIES

The latest issue of *Community Eye Health* (No 55) discussed the assessment and management of eye injuries in the developing world. For further information please contact: Journal of Community Eye Health, International Resource Centre, International Centre for Eye Health, Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, UK (tel: +44 (0)20 7612 7964; email: Anita.Shah@lshtm.ac.uk; online edition: www.jceh.co.uk). Annual subscription (4 issues) UK £28/US\$45. Free to developing country applicants.

8th EUNOS Meeting – 2007

The 2007 European Neuro-ophthalmology Society meeting (EUNOS; www.eunos.web.org) will be taking place in Istanbul, Turkey on 26-29th May 2007. For further information please visit www.eunos2007.org, email: or contact Pinar Aydin aydinp@eunos2007.org.

Teaching courses on Retinal and Vitreous Surgery

Several teaching courses on Retinal and Vitreous Surgery have been organised throughout 2006 and 2007 around the world in association with the International Faculty. For further information on each of these courses please contact Ingrid Kressig, Univ. Augenklinik Theodor-Kutzer-Ufer 1-3, 68164 Mannheim, Germany; email: Ingrid.kressig@augen.ma.uni-heidelberg.de; website: <http://kressig.uni-hd.de/>.