combination in close sequence resulted in a dramatic improvement in vision and CME.

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Sir,

Acute hydrops in a corneal graft for keratoconus

Case report

A 50-year-old gentleman presented to eye casualty with a 1 week history of reduced vision and headache above his left eye. He had a left corneal graft for keratoconus in 1988 and had not been seen by us since 1993 when his aided vision was 6/9 right 6/36 left.

On examination, his aided visual acuity was 6/12 right and hand movements left. On the right side, there was a mild keratoconus. On the left side there was severe oedema of the corneal graft and an obvious split in Descemet's membrane in the graft. The host cornea was unaffected (Figure 1).

A diagnosis of hydrops affecting the corneal graft was performed. He was treated with intensive topical steroid as the differential diagnosis was of graft rejection. However, the steroid drops were quickly tailed down as they did not seem to improve the clinical course and we were confident with our diagnosis.

One month later, the hydrops had resolved leaving only minimal scarring and slightly increased graft thickness (Figure 2). His visual acuity was 6/12 right 1/36 left with glasses.

Figure 1 Appearance on presentation.

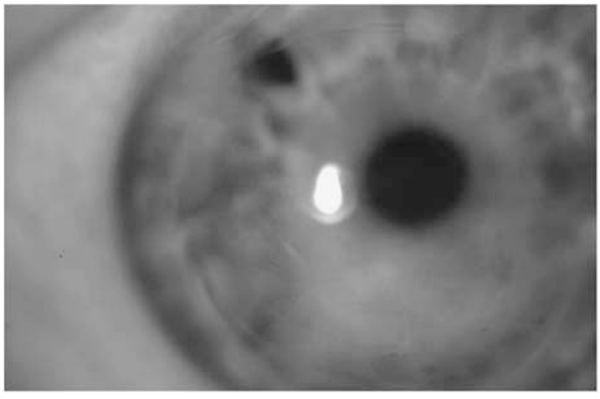

Figure 2 Appearance at one month.

Comment

Keratoconus is a progressive, bilateral, non-inflammatory degenerative condition, leading to increasing irregular astigmatism. Keratoplasty is indicated when other treatment methods such as glasses, contact lenses, INTACS or DALK either fail or are not suitable. It has been shown that keratoconus can recur in a graft in 11.7% cases, with a mean time to recurrence of 17 years.[1]

Hydrops is caused by a break in Descemet's membrane and is believed to occur in 2.6–2.8% cases with keratoconus.[2] The differential diagnosis for hydrops occurring within a graft includes endothelial rejection but in this case the split in Descemet's membrane was clearly seen. Hydrops has been reported previously in a corneal graft where the hydrops occurred in the host tissue or in the host-graft junction and extended into the corneal graft.[3,4] However, we believe that this is the first reported case, in which corneal hydrops has been found to occur purely in a corneal graft.

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Sir,

Variations in prevalence estimates of epiretinal membranes

We read with interest the article by You *et al* describing the prevalence of epiretinal membranes (ERM) in the Beijing Eye Study (BES).[1] While varying prevalence rates of ERM have been reported in different ethnic groups, with rates from 6 to 11.8% in whites, 18.5% in Hispanics, and 4% in Japanese,[2,3] the BES reported the lowest prevalence rate in the literature (2.2%). Interestingly, the prevalence estimates were equal for both cellophane macular reflex (1.8%) and premacular fibrosis (1.8%). Previous studies, however, show that cellophane macular reflex, an earlier form of ERM, is invariably more common than premacular fibrosis, a later stage of ERM. Additionally, the data presented for the associations are inadequate for readers to examine possible reasons for the lower prevalence. For example, there are no point estimates (i.e., odds ratios) accompanying the *P*-values and 95% confidence intervals. It is also unclear whether the associations were adjusted for age. All reported associations therefore can only be interpreted as unadjusted, which are not helpful in understanding risk factors associated with age-related conditions.

Nonetheless, we offer several possibilities for why their findings contrast with existing epidemiological data. First, grading of ERM was based on non-stereoscopic retinal photographs in the BES, while most other studies used stereoscopic retinal photographs. The use of non-stereoscopic photographs may miss subtle retinal abnormalities, such as early age-related macular degeneration[4] and ERM.[2] The BES has also previously reported low rates of age-related macular degeneration in their sample.[5] Second, while the authors described that ERM assessment was performed by a trained grader, actual reliability of the grading process was not defined. Some information regarding intra- and inter-grader variability would be helpful. Third, nuclear cataract was highly prevalent (82%) in the BES. ERM rates may be lower in eyes with nuclear cataract owing to increased difficulty in detection of this lesion.[4] However, the authors claim that 98.6% of the sample had gradable retinal photographs. All these factors are potential sources of ascertainment errors that could lead to underestimation of ERM in the BES. Further studies are needed to provide clear understanding of possible racial/ethnic differences in the epidemiology of ERM.

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Sir,

Reply to Cheung *et al*

The authors would like to thank Dr Cheung and colleagues for their letter and interest in the article.[1] The authors agree with Dr Cheung and colleagues that for the descriptions of the correlations between the epiretinal membranes and the ocular and general parameters, the correlation coefficient, the *P*-value, and the 95% confidence intervals of the odds ratios were given, while the odd ratios themselves were omitted. The description of the statistical analysis would have been considerably more precise, if the odds ratios had additionally been given, which now can only be estimated from their 95% confidence intervals in the manuscript.

The authors also agree with Dr Cheung *et al* that, as also pointed in the article,[1] differences in the grading method including use of monoscopic *versus* stereoscopic photographs may be one of the reasons for the differences in the prevalence rates of the epiretinal membranes between the various studies. In addition, as Dr Cheung and colleagues point out, nuclear cataract may have prevented the delectability of epiretinal membranes in some eyes with considerable cataract.

Although the intra-observer repeatability of the assessment of the epiretinal membranes was not measured in the Beijing Eye Study, the grader was trained and repeatedly checked by a panel of experienced clinicians, particularly in cases of doubt.

In summary, the authors completely agree with Dr Cheung in his constructive criticism of the weak