²Department of Ophthalmology and Orthoptics Royal Hallamshire Hospital, Sheffield, UK

³University of Sheffield Sheffield, UK

Correspondence: AD Singh Department of Ophthalmic Oncology Cole Eye Institute (i3-129) Cleveland Clinic Foundation Cleveland, USA Tel: + 1216 444 0430 Fax: + 1216 445 7654 E-mail: ArunSingh@Eyetumors.Com

Eye (2005) **19,** 482–484. doi:10.1038/sj.eye.6701475 Published online 30 July 2004

Sir,

484

Minimising the risk of iatrogenic intraocular damage

Saha and Price report a case of severe intraocular damage due to a Rycroft cannula flying loose during cataract surgery,¹ and suggest that the routine use of luer-lock syringes will reduce the risk of this. Similar adverse events have been reported previously.² The most important measure that can preclude such unfortunate occurrences is to handle all syringes bimanually while undertaking any intraocular manoeuvres. One hand controls the barrel and the plunger, and the other hand firmly grasps the hub of the cannula or needle at its attachment to the syringe. The second hand can thus feel a cannula giving way, if this were to occur, and prevent it flying loose into the eye. I have also found that the bimanual grasp improves the control and manipulation of the tip.

References

- 1 Saha N, Price NC. Lagrogenic retinal tear and vitreous haemorrhage with Rycroft cannula during phacoemulsi-fication cataract surgery. *Eye* 2003; **17**(2): 260–261.
- 2 Dinkaran S, Kayarkar VV. Intraoperative ocular damage caused by a cannula. *J Cataract Refract Surg* 1999; **25**(5): 720–721.

S Prasad

Arrowe Park Hospital, Upton, Wirral CH49 5PE, UK

Correspondence: S Prasad E-mail: sprasad@rcsed.ac.uk

Eye (2005) **19,** 484. doi:10.1038/sj.eye.6701485 Published online 21 May 2004

Sir,

Correlation of lipid layer thickness measurements with fluorescein tear film break-up and Schirmer's test

I read with interest the article by Isreb *et al*,¹ where they have positively correlated the lipid layer thickness with fluorescein tear film break-up time (FBUT) and Schirmer's test (STA).

Meibomian gland dysfunction (MGD) is a fairly common condition, and the reported prevalence at one study was 38.9%.² It is easy to guess therefore that it is one of the major causes of dry eye syndrome. It is therefore quite a useful study, and I would like to convey my appreciation to all the authors.

Meibum (Meibomian gland secretion) contains hydrocarbons, sterol esters, wax esters, triglycerols, free cholesterols, free fatty acids, and polar lipids (in decreasing order of abundance). Meibum melts at 35°C and is thus liquid at the surface of the eye.³ This property of the lipid layer is utilized in the treatment of dry eyes using hot compresses.⁴

The normal lipid layer thickness is stated to be ideally more than 120 nm, however, will a thickness of less than 60 nm alone with normal FBUT and STA be sufficient for a diagnosis of dry eye.²

Tandem scanning confocal microscopy is another modality for the assessment of the tear film and is thought to be more accurate than the method used by the authors. It would be nice to know the authors' opinion on this.

References

- 1 Isreb MA, Greiner JV, Korb DR, Glonek T, Mody SS, Finnemore VM *et al.* Correlation of lipid layer thickness measurements with fluorescein tear film break-up time and Schirmer's test. *Eye* 2003; **17**(1): 79–83.
- 2 Hom MM, Martinson JR, Knapp LL, Paugh JR. Prevalence of Meibomian gland dysfunction. *Optom Vis Sci* 1991; 65(5): 390–391.
- 3 Tiffany JM. Individual variations in human meibomian lipid composition. *Exp Eye Res* 1985; **27**: 289.
- 4 Olson MC, Korb DR, Greiner JV. Increase in tear film lipid layer thickness following treatment with warm compresses in patients with meibomian gland dysfunction. *Eye Contact Lens* 2003; **29**(2): 96–99.

A Raj

Southend Associate University Teaching Hospital Ophthalmology, Prittlewell Chase Westcliff-On-SEA Southend, Essex SSO ORY, UK

Correspondence: A Raj Tel: 07763 340 100