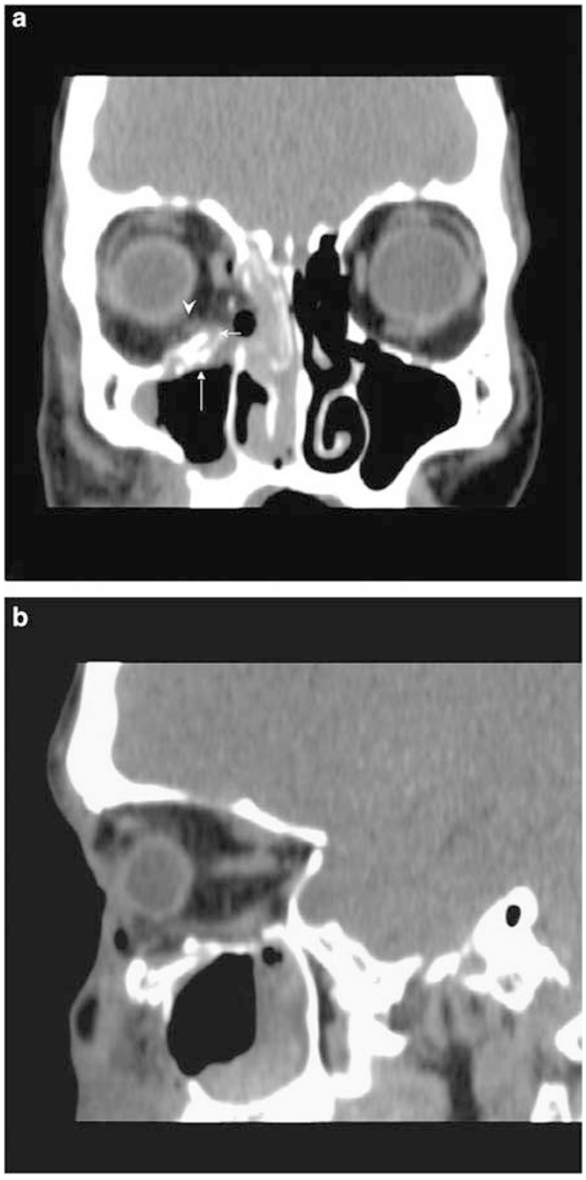

Figure 2 (a) A coronal CT scan of the same patient after Foley balloon catheterization demonstrating stretching of the inferior rectus muscle (arrowhead) toward the orbital floor fracture (short arrow) abutting bone fragments (long arrow). (b) A sagittal CT scan after Foley balloon catheterization showing a disrupted course of the inferior rectus muscle in the orbit and stretching toward the orbital floor fracture ('deflection sign'). Orbital floor exploration disclosed entrapment of the inferior rectus muscle sheath within the orbital floor fracture.

Balloon sinus expansion should be employed cautiously or avoided in the presence of orbital floor fracture. When employed, inflation should be slow and gradual and deflation should be avoided. Removal of the balloon may be delayed until complete healing. Otherwise, other open-system or endoscopic procedures may be preferred because they allow direct visualization of the surgical site.

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Sir,

Angle-closure glaucoma in East Asian and European people. Different diseases?

Congratulations on the important article by He, Foster, Johnson and Khaw in the January 2006 issue of *Eye*. It is clear that the chronology of steps leading to angle-closure are not fully understand. One reason for this, I believe, is the continuing practice of describing the configuration of the anterior chamber angle almost exclusively in terms of the angle created by a tangent to the posterior surface of the cornea and the anterior surface of the iris. There still does not appear to be recognition that accurate description of the anterior

chamber angle configuration demands considering at least three separate characteristics: the locus of the attachment of the iris to the inner wall of the eye (the ciliary body, the angle recess, or the cornea), the curvature of the peripheral iris, and the space between the iris and the cornea as measured with diametry, or anterior chamber depth or estimate of angularity as in the Shaffer system. No one has yet figured out a way to put these three variables together in a meaningful way. Even more seriously misleading, however, is the practice of ignoring one or more of the variables. Consequently, the results of various studies are literally comparing 'apples' and 'oranges' so it is not surprising that there is so much disagreement amongst these. For example, UBM is a beautiful way to evaluate two aspects of configuration, specifically the curvature of the iris, and the 'angularity'. However, because the site of the posterior trabecular meshwork is not well defined in UBM and because the relationship of the posterior trabecular meshwork with the insertion of the iris varies markedly, UBM is not a good method of characterizing the entire nature of the anterior chamber angle, or explaining why patients are likely to develop angle closure. He and colleagues' article points out some of these shortcomings and moves the field ahead. However, what is still missing is a unifying description that recognizes that configuration requires incorporating various variables.

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Sir,

Reply to Dr Spaeth

We would like to thank Dr Spaeth for his kind comments and heartily agree with him that iridotrabecular angle is but one of a myriad of anatomical characteristics of the iridotrabecular recess that is likely to determine risk of contact between iris and trabecular meshwork. However, it is one with a proven association between evidence of anterior segment pathology (PAS) and glaucomatous optic neuropathy.[1] Dr Spaeth's classification identifying iridotrabecular angle, iris profile, as well as the apparent and true level of iris insertion is currently unsurpassed for describing gonioscopic anatomy in cases of angle-closure.[2] However, the advent of UBM and OCT imaging of anterior segment structures has helped reinforce our awareness that the relationship of iris and trabecular meshwork change on a second to second basis.[3] The ultimate challenge will be to assimilate the static features that Spaeth highlights into a comprehensive, dynamic model of the determinants of iridotrabecular contact, which is validated in longitudinal studies of incident angle-closure and glaucomatous optic neuropathy.

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Sir,

On eye analyses

The articles by Halberstadt *et al*,[1] Taner *et al*,[2] and Loukovaara *et al*[3] illustrate systemic errors in statistical analysis. They use two-sample *t*-tests or analysis of variance (ANOVA), but ignore their shortcomings. These compare the means of normal populations assuming unknown homogeneous variances. While the Central Limit Theorem justifies normality for inferences on means, unknown variances need not be equal, making these tests unsuitable for general mean comparisons.