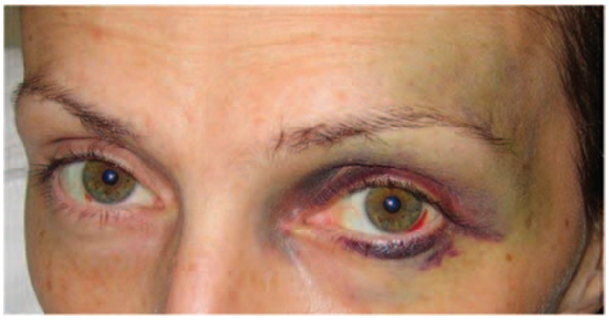

**Figure 1** The Eye of Horus.

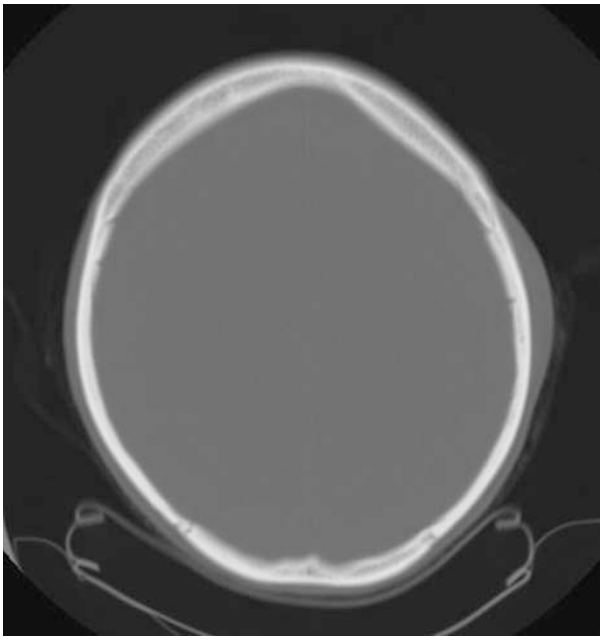

**Figure 2** Subgaleal haematoma.

minor trauma can result in bleeding into the subgaleal (epicranial subaponeurotic) loose connective tissue in the scalp in vulnerable individuals such as infants,[1] patients with platelet or coagulation disorders, those undergoing intensive chemotherapy, or the elderly.[2] Blood spreads easily in the subgaleal loose connective tissue layer, and can enter the eyelids and the root of the nose because the frontalis muscle inserts into the skin and subcutaneous tissue and does not attach to the bone. 'Black eyes' can result from an injury to the scalp or forehead and most blood enters the upper eyelid, although some may also enter the lower one.
Most often, conservative management is sufficient. Occasionally, SGH can lead to bilateral orbital haemorrhages with loss of vision needing surgical intervention.[3]

Kohl eyeliner[4] was worn by both men and women in ancient Egypt for adornment and to reduce solar glare and ward off evil spirits. How the practise originated is less clear. We hypothesize that dark outlining of the eye, as in the eye of Horus, had its origin most likely as an

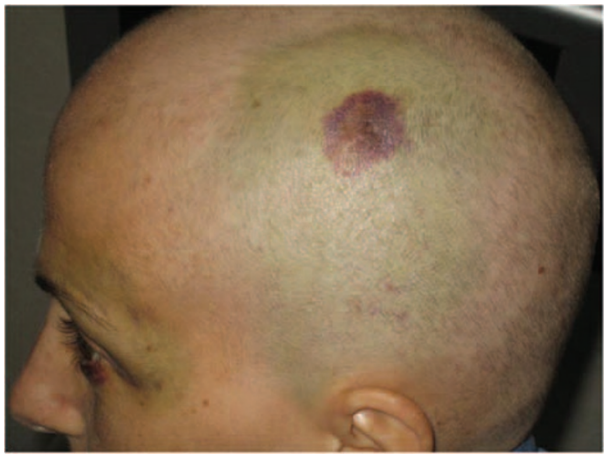

**Figure 3** Purpura and ecchymosis.

astute observation of what may have been the clinical manifestations of a SGH, similar to that seen in our patient. This ancient practise of outlining and shadowing the eye became immortalized in art throughout the world and continues to be a symbol of beauty throughout the ages – an instance of art imitating life.

**Conflict of interest**
The authors declare no conflict of interest.

**References**

1 Amar AP, Aryan HE, Meltzer HS, Levy ML. Neonatal subgaleal hematoma causing brain compression: report of two cases and review of the literature. *Neurosurgery* 2003; **52**: 1470–1474.
2 Chotirmall SH, Pearson E, Saad AZ, Moore A, Kneafsey B, Donegan CF. Posttraumatic subgaleal hematoma with orbital extension associated with clopidogrel usage in an elderly patient: case report. *J Am Geriatr Soc* 2007; **55**: 135–136.
3 Karcioglu ZA, Hoehn ME, Lin YP, Walsh J. Ocular involvement after subgaleal hematoma. *J AAPOS* 2008; **12**: 521–523.
4 al-Hazza SA, Krahn PM. Kohl: a hazardous eyeliner. *Int Ophthalmol* 1995; **19**: 83–88.

EM Buda-Okreglak and P Krapiva
DOM-Hematology-Oncology, WRAMC,
Washington, DC, USA.
E-mail: edwarda.buda-okreglak@amedd.army.mil

*Eye* (2010) **24,** 937–938; doi:10.1038/eye.2009.226;
published online 4 September 2009

Sir,

**UK national survey on personalized customization of A-constant in cataract surgery**

At a time when cataract surgery is performed on patients with increasingly high expectations, the refractive outcome is no less important than surgical and visual

outcome. A-constants provided by the intra-ocular lens manufacturers are to be considered as guides only; individual customization of the A-constant should be calibrated against the post-operative refraction to achieve the best possible refractive outcome because of potential variation in techniques by biometrists and surgeons.

The 2004 Royal college of Ophthalmologists cataract surgery guidelines[1] strongly recommend that each ophthalmic department, and preferably each surgeon, should customize their A-constant through a regular audit system.

This study aims to determine the practice of A-constant customization in the United Kingdom. To the best of our knowledge, this is the first UK national survey investigating the practice of individual personalized A-constant customization among cataract surgeons.

Paper questionnaires were posted to all NHS consultant ophthalmologists in the United Kingdom. Out of 900 questionnaires, 366 were returned and 341 were analysed. Twenty-five were excluded because of non-involvement of cataract surgery by the corresponding consultants.

A total of 278 (81.5%) consultants were aware of the Royal College guidelines on biometry practice in cataract surgery. Departmental A-constant customization was performed in 57.2% of the units (195/341). However, only 31.7% (108/341) admitted to individually personalizing their individual A-constants, of whom 94.4% customized specifically for each lens type. Years qualified as a consultant was found to be significantly associated with customization of A-constants, with the 11–19 years group being most likely to carry out customization ($P=0.013$, Figure 1). There was no significant difference between teaching and district general hospitals ($P=0.877$, Figure 2). Only 41.6% (142/341) performed the customization separately for ultrasound and partial coherence laser interferometry (for example, IOL master) techniques. A total of 28.2% (96/341) did not regularly audit their biometry results. The remaining 245 audited their results ranging from monthly to 3-yearly (Figure 3).

The number of departments customizing A-constants has increased from 47% in 2004 (as given in Gale *et al*.[2]) to 57.2%, but less than a third of UK cataract surgeons carry out personalized A-constant customization, a practice which can potentially further enhance the accuracy of refractive outcome in cataract surgery.

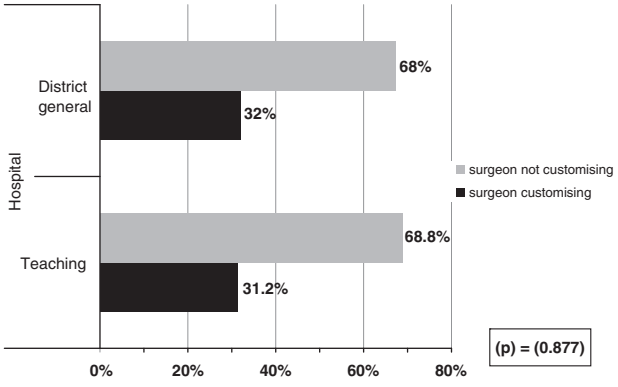


**Figure 2** Surgeon customization *vs* hospitals.

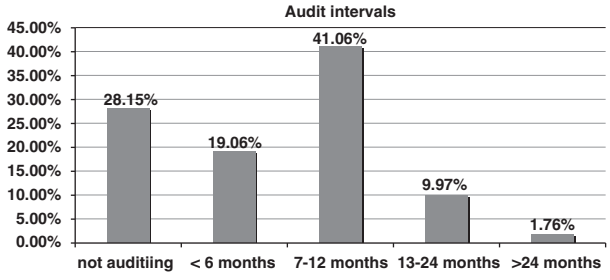


**Figure 3**

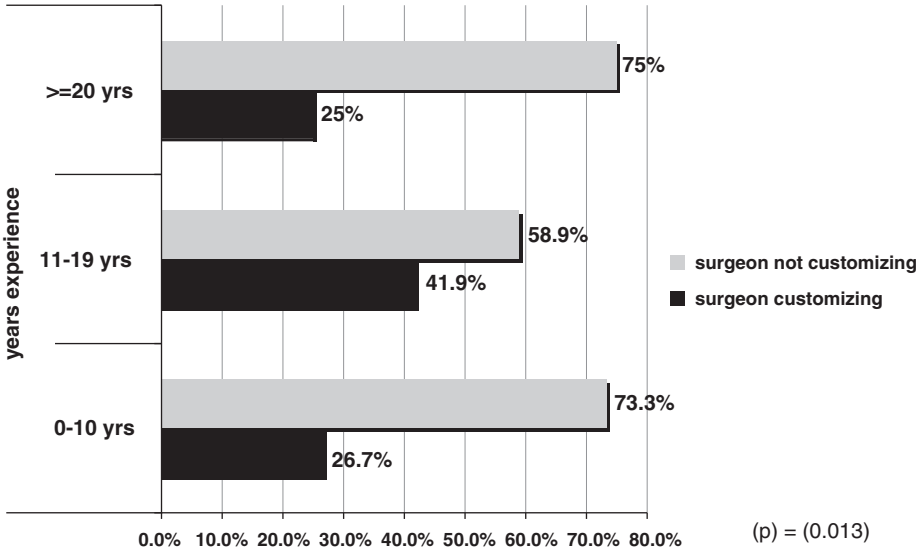


**Figure 1** Surgeon customization *vs* years of experience.

**References**

1 The Royal College of Ophthalmologists. *Cataract Surgery Guidelines* 2004. The Royal College of Ophthalmologists: London, 2004. http://www.rcophth.ac.uk/docs/publications/published-guidelines/FinalVersionGuidelinesApril2007Updated.pdf.

2 Gale RP, Saha N, Johnston RL. National biometry audit. *Eye* 2004; **18**(1): 63–66.

L Osman and AKK Chung

Mid Yorkshire NHS trust, Clayton Hospital, Wakefield, West Yorkshire, UK
E-mail: lina_a_mustafa@yahoo.co.uk

*Eye* (2010) **24,** 938–940; doi:10.1038/eye.2009.238; published online 2 October 2009

Sir,

**Giant retinal pigment epithelial rip in polypoidal choroidal vasculopathy with vitreous haemorrhage after pars plana vitrectomy**

Polypoidal choroidal vasculopathy (PCV) is a variant type of age-related macular degeneration. We present an unusual case with PCV and vitreous haemorrhage, developing a giant retinal pigment epithelial rip after pars plana vitrectomy.

*Case report*

A 63-year-old man complained of a sudden painless visual field defect in the right eye since 2 weeks, along with floaters and progressive blurry vision that developed during the second week. At presentation, his visual acuity was counting fingers in the right eye. Funduscopic photograph of the right eye showed moderate vitreous haemorrhage and bullous subretinal haemorrhage in the inferotemporal area. Tissue plasminogen activator was injected intravitreally 24 h preoperatively, followed by phacoemulsification, intraocular lens implantation, and pars plana vitrectomy with endotamponade of 10% perfluoropropane. Three weeks later, funduscopic photograph of the eye showed a giant retinal pigment epithelial (RPE) tear outside the inferotemporal vascular arcade (Figure 1a). Fundus fluorescein angiography revealed an occult choroidal neovascularization and a giant RPE tear with pooling of the dye to the subretinal space (Figure 2a and b). Indocyanine green angiogram (IGA) showed a hyperfluorescent spot of polypoidal choroidal vasculopathy located beside the inferotemporal fovea (Figure 2c and d). IGA-guided laser photocoagulation was applied on the polypoidal lesion. At 12-month follow-up, best-correct visual acuity was 20/30 in the right eye. Fundoscopic examination showed a persistent RPE rip, residual subretinal haemorrhage, and resolution of submacular haemorrhage (Figure 1b).

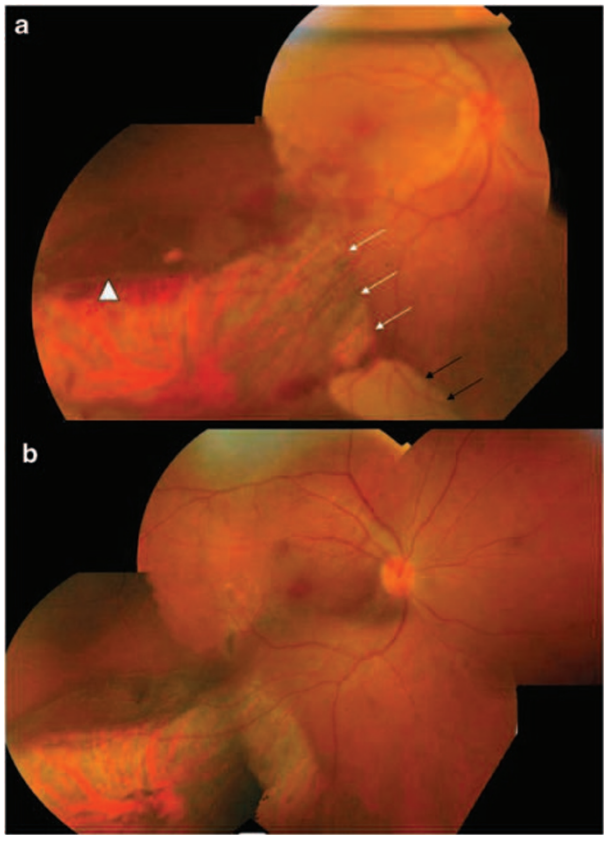


**Figure 1** Fundus photographs of a patient with polypoidal choroidal vasculopathy in the right eye. (a) On day 14 after vitrectomy, fundus photograph of the right eye showed a giant retinal pigment epithelial (RPE) rip (white arrows) with rolling edge (arrowhead) and subretinal haemorrhage (black arrows). (b) Six months later, fundus photograph showed a persistent RPE rip, resolution of submacular haemorrhage, and residual subretinal haemorrhage adjacent to the RPE rip.

**Comment**

Large, thick subretinal haemorrhage and/or sub-RPE haemorrhage caused by PCV often result in a poor visual outcome, especially when the haemorrhage is massive and extends to the periphery.[1,2] In eyes with PCV, RPE tears can occur at the margin of serosanguineous pigment epithelial detachments—either spontaneously or after photodynamic therapy.[2] However, a giant RPE tear is uncommon and may cause serous and/or haemorrhagic subretinal detachment in such patients.

In our case, the visual field was initially affected by sub-RPE and/or subretinal haemorrhages; subsequently the central visual acuity was seriously impaired due to vitreous haemorrhage 1–2 weeks later. The occurrence of a giant RPE rip was unusual, given the huge pigment epithelial detachment, the subpigment epithelial haemorrhage, and choroidal neovascularization (PCV), exerting tangential as well as oblique subpigment epithelial haemorrhage. The surgical intervention certainly could add to the anterior-posterior and mechanical forces associated with the giant rip.

Spontaneous healing of RPE rip is proposed to occur by several mechanisms, including a layer of hypopigmented