1230

Sir, Reticulated hyaluronic acid implant (SK-GEL) dislocated into anterior chamber for 10 months

Laser goniopuncture may cause migration of intrascleral implant in non-penetrating trabecular surgery (NPTs).

Case report

Here, we report an unusual case of hyaluronic acid implant (SK-GEL) displacement into the anterior chamber (AC) for 10 months after NPTS. A 22-yearold-man received NPTS on his left eye for open angle glaucoma. The postoperative IOP OS was less than 20 mmHg without medication. Seven months later, the IOP OS was found to be high again (30 mmHg). Laser goniopuncture was performed to penetrate the residual trabeculo-Descemet's membrane to increase filtration. The IOP OS decreased into the teens after laser treatment. Twenty days later, he complained of blurred vision and decentred pupil in his left eye after massaging the eye





Figure 1 (a) Biomicroscopic view of the anterior segment of the left eye. Pear-shaped pupil decentred superiorly. The filtration bleb was pale and flat with conjunctival congestion. Transparent SK-GEL was located in the inferior quadrant of AC but was subtle under biomicroscopy. (b) Ultrasound biomicroscopic (UBM) image of the left eye. SK-GEL (white arrow) was located in the inferior part of AC.

due to itch. Ophthalmologic examination results were as follows: IOP OS was 43; the filtration bleb was flat and pale with conjunctival congestion; the pupil was pearshaped and decentred superiorly (Figure 1a). Triangle transparent SK-GEL was observed in the inferior part of AC. Gonioscopy revealed that the superior iris root wedged into the intrascleral chamber through the laser hole of the Descement's membrane. Ultrasound biomicroscopy (UBM) showed that the SK-GEL was located in the inferior quadrant of AC (Figure 1b). Goniosynechialysis was performed to reposition the iris root, but the SK-GEL was left in this phakic eye. Postoperative IOP OS was 16. At 10 months, the SK-GEL was still in the AC with no apparent change in shape and size. The AC was quiet with IOP of 15.

Comment

Recent modifications in NPTS, including the use of implants and laser goniopuncture, appear to result in improved IOP control.^{1,2} However, such modifications may lead to new complications such as in this patient.^{3–5} Collagen implants and SK-GEL are commonly used in NPTS. Collagen implants can be sutured on the scleral bed, while SK-GEL is too crisp to be sutured, which may cause migration of the gel when the intrascleral space is opened. In this case, the Descemet membrane was penetrated by laser goniopuncture and the eye massage may have caused the migration of SK-GEL. The results of the 10-month follow-up of this patient indicate that SK-GEL in AC may be safe.

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