Transpalpebral extrusion of a silicone sponge exoplant

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Abstract
We report an unusual case of scleral buckle extrusion in a 63-year-old woman. A 5 mm silicone sponge exoplant eroded through Tenon’s capsule, conjunctiva, and full-thickness upper eyelid, traversing the tarsal plate.

Extrusion of scleral buckling material is not an uncommon complication of scleral buckling surgery. We recently treated a woman with transpalpebral migration of a soft silicone sponge exoplant, a distinctly unusual presentation of scleral buckle extrusion.

Case report
A 63-year-old blind woman presented with a one-week history of mild pain and foreign body sensation in the left eye. She had no light perception in the right eye owing to trauma and failed glaucoma surgery many years previously. The left eye had undergone multiple procedures for glaucoma, two penetrating keratoplasties, a scleral buckling procedure, and two subsequent revisions of the scleral buckle combined with pars plana vitrectomy. During the most recent buckling procedure in 1982 the eye was encircled with a 5 mm diameter silicone sponge exoplant. The left eye lost light perception in 1985 owing to recurrent retinal detachment with proliferative vitreoretinopathy.

On examination in July 1990 the left eye was phthisical. The 5 mm silicone sponge had extruded through Tenon’s capsule and conjunctiva inferotemporally, and had eroded through full-thickness upper eyelid, including the tarsal plate (Figs 1 and 2). A large pyogenic granuloma protruded from the adjacent tarsal conjunctival surface of the upper lid. The exoplant was removed and the lid defect primarily closed after excising the pyogenic granuloma and the epithelialised tract through skin and orbicularis muscle.

Discussion
Extrusion and intrusion of scleral buckling elements are well recognised complications of retinal detachment surgery. Intrusion by encircling polyethylene tubes or Arruga sutures was particularly common. It is less common with the newer, softer, more elastic silicone rubber materials. Nevertheless, in addition to transconjunctival erosion, silicone elements have eroded through sclera, into the vitreous cavity, and anteriorly into cornea.

Our patient is unusual in that the extrusion process did not come to medical attention until the silicone sponge had eroded through the tarsus and orbicularis muscle of the upper lid and emerged through the skin surface. For such
transpalpebral migration to occur it would be necessary for the eyelid to remain relatively stationary over the extruding exoplant. This patient’s bilateral blindness and phthisical left eye almost certainly facilitated the severe extrusion by reducing lid movement as well as patient awareness. We consider that transpalpebral erosion will continue to be a most uncommon presentation of scleral buckle extrusion.

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FIFTY YEARS AGO

Superficial epidemic punctate keratitis

In conclusion it might be useful to add that the designation ‘superficial punctate keratitis’ or ‘keratitis diversiformis et uveitis anterior’ would appear to be inappropriate as these do not define the primary condition, but serve to indicate its complication only. Our experience would seem to show that it is primarily a disease of the conjunctiva caused by an exogenous infection which according to its severity spreads to the lymphatic glands in one direction, and, in the other direction, to the adjacent tissues of the conjunctiva, involving the cornea and uvea, causing superficial or deep complications according to the depth to which the infection has travelled.