



# Extrusion of a silicone sponge explant through the lower eyelid

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## 1. Case report

A 48-year-old female was referred to our department after buckle exposure was diagnosed during a regular eye clinic consultation. The patient underwent scleral buckling in the left eye 10 years earlier and scleral buckling in the right eye eight years earlier (a silicone sponge was placed circumferentially from 4 o'clock to 10 o'clock). Subsequently, the patient had regular follow-ups at an eye clinic. Scleral buckle exposure was observed on the nasal side of the lower eyelid of the right eye (Fig. 1). A symblepharon was noted, suggesting a fistula from the bulbar conjunctiva to the skin. Fundus examination revealed no retinal detachment. The scleral buckle did not extrude in the left eye. There were no symptoms, like vision loss, pain, or infection. The patient noticed the skin change of the lower eyelid for several years but thought it was a skin problem. A retrospective review of the face images revealed buckle exposure at least two years ago. The buckle was easily removed from the eyelid skin side (Fig. 2). The skin wound was sutured with 6-0 nylon, with sutures removed after three weeks. Four months later, the symblepharon remained; skin wound was closed; and no infection, conjunctival defect, or recurrent detachment was observed (Fig. 3).

## 2. Discussion

Buckling material extrusion is a recognized complication of scleral buckling, typically occurring in the conjunctiva. Extrusion through the eyelid is rare, with only four reported cases, all through the upper eyelid.<sup>1</sup> This may be related to the tendency for retinal detachment, which is more common in the upper retina,<sup>2</sup> differences in mechanical stimulation by blinking, and anatomical differences between the upper and lower eyelids. Several theories exist for silicone sponge rejection, including infection, mechanical factors, and allergy.<sup>3</sup> In this case, mechanical stimulation is likely the primary cause of the buckle extrusion, given the absence of infection and no buckle extrusion in the left eye. A symblepharon caused by inflammation and the lack of fat tissue due to the patient's slender body type may have contributed to the extrusion from the eyelid.

## 3. Conclusion

We describe an unusual case of silicone sponge extrusion through the lower eyelid eight years post-surgery, without complaints. After scleral buckling, attention should be paid to eyelid skin changes and the presence of symblepharon.

## CRediT authorship contribution statement

**Kentaro Kawai:** Writing – review & editing, Writing – original draft, Investigation, Data curation, Conceptualization. **Rina Ohashi:** Investigation. **Masayuki Akimoto:** Writing – review & editing, Supervision, Conceptualization.

## Patient consent

Written consent to publish this case has not been obtained. This report does not contain any personal identifying information.

## Authorship

All authors attest that they meet the current ICMJE criteria for authorship.

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## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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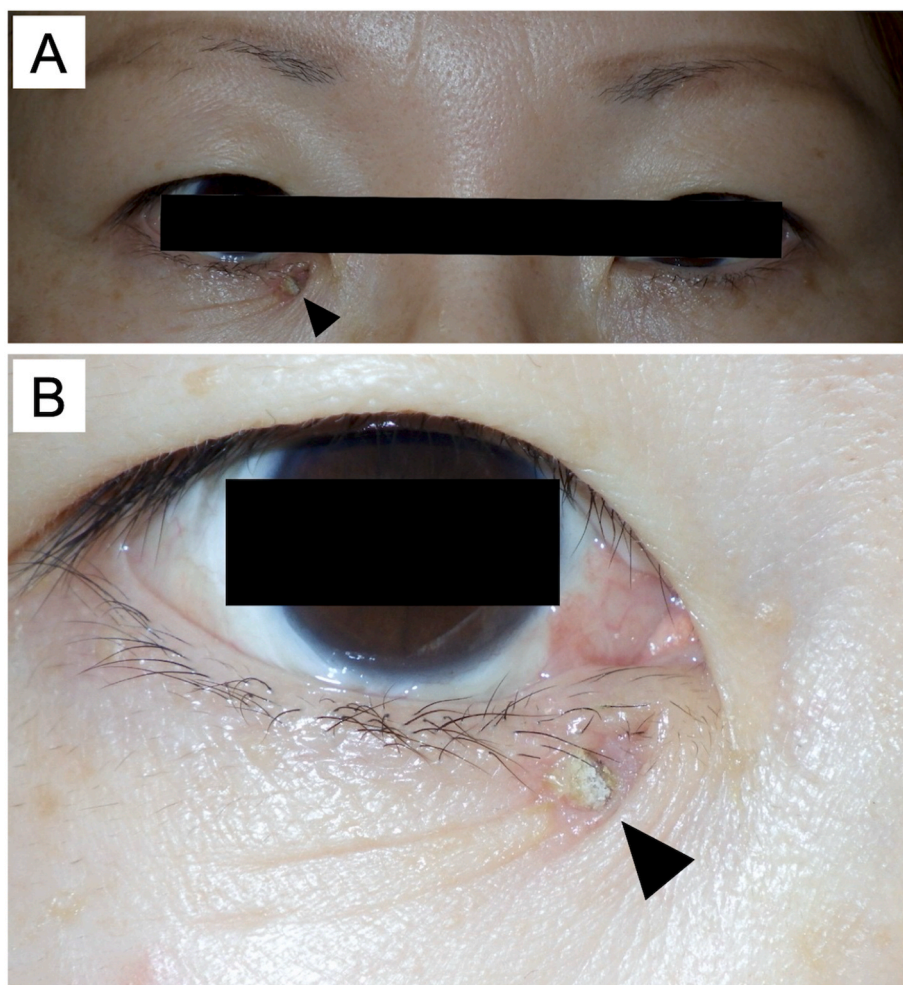
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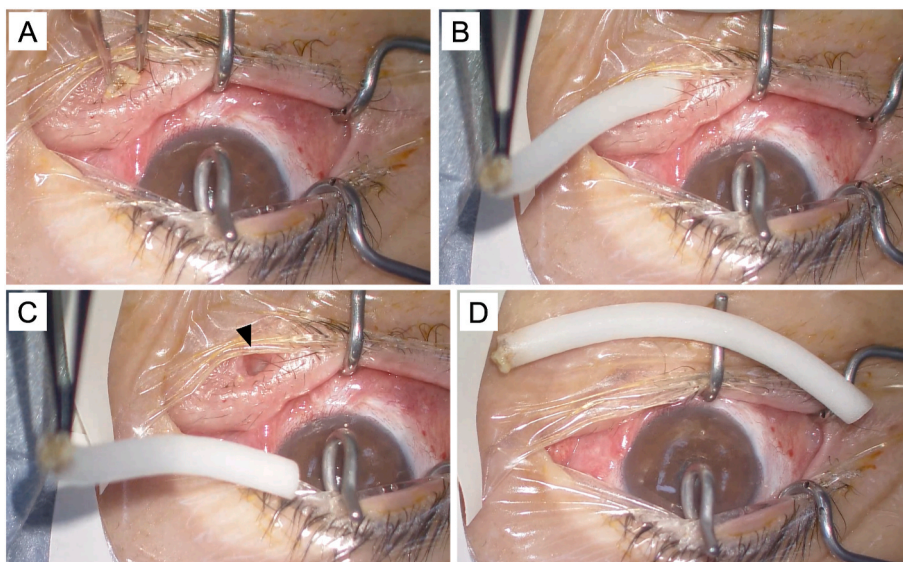
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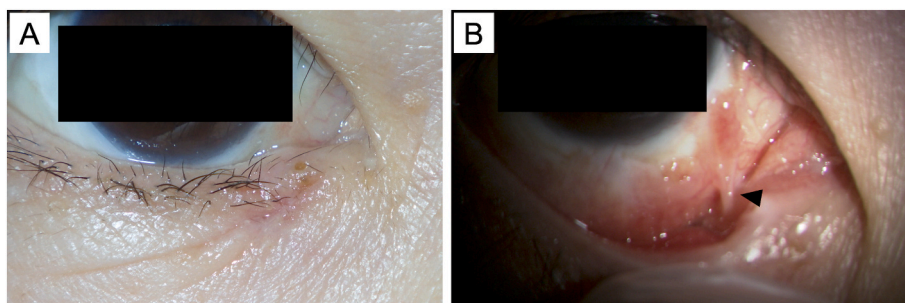
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**Fig. 1.** A–B. The edge of the scleral buckling material was exposed on the lower eyelid nasal side of the right eye (arrow head).



**Fig. 2.** A–C. The scleral buckle was removed from the fistula (arrow head in C) on the skin side without resistance. D. No defects in the removed scleral buckle were observed.



**Fig. 3.** A. The skin wound was closed. B. A symblepharon remained (arrow head) and the lower eyelid could not be rotated.

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