

Scleral cut-down technique of subretinal fluid drainage in scleral buckle surgery for rhegmatogenous retinal detachment

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Background: The art of scleral buckle (SB) surgery is being largely forgotten. However, it still remains a good option for selected cases of rhegmatogenous retinal detachment. Drainage of subretinal fluid (SRF) is one of the most crucial steps of the surgery. When performed correctly, it gives the advantage of immediate retinal reattachment, and it hastens recovery. However, it has its own set of complications. **Purpose:** To demonstrate, step by step, the scleral cut-down technique of SRF drainage in SB surgery for rhegmatogenous retinal detachment (RRD) and to discuss its indications, contraindications, and complications. **Synopsis:** Longstanding RRDs with bullous detachments, old age, inferior breaks, or multiple breaks are indications of SRF drainage. In shallow RDs or young patients, a non-drainage procedure may be preferred. It is safer to drain at the bed of the buckle. After the sclera is cut and dissected, it is essential to inspect the choroid for the presence of large vessels. Choroidal vessels are avoided from getting injured while perforating. The release of pigments indicates the end of the drainage. Various possible complications can be prevented by being careful in the surgical technique. **Highlights:** Diagrammatic illustrations explain the steps of the surgical technique. Intraoperative complications have been explained in an easy-to-understand manner with tips to manage such conditions and their prevention. The video highlights the correct way of performing SRF drainage. **Online Video Link:** <https://youtu.be/L0TrdkCwk20>

Key words: Scleral buckle, scleral cut-down technique, sub-retinal fluid drainage