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Editorial Article

Letter to the Editor: Drainage of Retrobulbar Hematoma Using a 14G Intravenous Catheter

Jorge Schwember¹, MD; Luisa Madrid, MD²

¹Centro Laser, Viña del Mar, Chile

*Corresponding author

Jorge Schwember, MD. Centro Laser, Viña del Mar, Chile

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Introduction

Retrobulbar hematoma (RBH) is one of the most feared causes of orbital compartment syndrome. It may arise secondary to trauma, vascular malformations, or as a complication of surgery [1-4]. Its incidence following blepharoplasty is approximately 0.055% [5]. The primary concern in RBH is vision loss resulting from intra- and extraocular compression of the optic nerve [6,7]. Prompt orbital decompression is therefore a true ophthalmologic emergency [7,8]. The established management for achieving this is lateral orbital canthotomy and cantholysis (LOCC) [8,9]. Patients treated within two hours of onset generally have a better prognosis regarding visual acuity [10].

Based on our experience with oculoplastic surgery for orbital pathologies, we propose the use of 14-gauge intravenous catheters as a rapid drainage method (Figures 1 and 2). We strongly recommend maintaining the immediate availability of four 14G catheters in the operating room—one for each orbital quadrant—to allow swift evacuation of a potential RBH. If this technique proves insufficient, LOCC should subsequently be performed.







Figure 1. (A, B) 32-year-old male with upper eyelid retraction for ten days. (C) MRI showing an anterosuperior orbital mass.

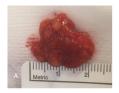






Figure 2. (A) Histopathology consistent with idiopathic orbital inflammation. (B) Active aspiration at the end of tumor removal. (C) Passive extrusion of serous fluid two days post-operation.

Our proposed method is simple, fast, minimally traumatic, and requires minimal training for surgeons familiar with periocular anatomy. We have also extended this drainage approach to other surgical procedures involving mobilization of skin flaps, such as facelift surgery.



Figure 3. Use of a 14G catheter as a drainage in eyelid reconstruction.

Conflict of Interest

The authors declare no conflicts of interest.

² Constanza Orrego, Medical Student. Universidad Diego Portales, Santiago, Chile

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