
Management of Severe Postoperative Bleeding with Hemostatic Matrix

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Fortunately, severe postoperative eyelid bleeding is quite rare. The incidence of orbital hemorrhage after blepharoplasty is approximately 1:2,000 with only 1:22,000 (0.0045 %) suffering permanent visual loss (Hass et al. 2004). Bleeding risks include hypertension, perioperative blood-thinning agents, postoperative vomiting, and increased physical activity. Postoperative ketorolac should generally be avoided following eyelid and orbital surgery to minimize the risk of postoperative orbital hemorrhage. Although uncommon, management of postoperative bleeding following thrombolytic therapy is challenging and carries high visual morbidity risk.

I have had to treat two postoperative blepharoplasty patients that required lifesaving (e.g., pulmonary embolism) postoperative thrombolytic therapy. This caused severe bleeding management issues, and once the standard and conservative methods had proven unsuccessful, it became necessary to utilize a more unorthodox approach (Burroughs 2009). Both instances responded well to injection of Surgiflo® (Ethicon, Johnson & Johnson, Cornelia, GA, USA), which is a hemostatic matrix derived from gelatin sponge.

A hemostatic matrix alternative is Floseal® (Baxter Healthcare, USA). Though off-label, it may be emergently indicated to prevent further blood loss and to reduce the risk of a sight-threatening orbital hemorrhage. One of the patients had failed numerous cautery attempts, patching, and thrombin-soaked gelatin foam. The hemostatic matrix, once mixed per the manufacturer instructions, may be injected through a soft, flexible catheter tip. Only a small amount is necessary (less than a 1 cc per side), and excess may be gently debrided away. It is advisable to avoid deep (e.g., postseptal injection) as the material expands and could potentially cause a compartment syndrome. The incisions may be re-closed over the material loosely. Careful observation for signs (e.g., proptosis, vision loss) of persistent deeper bleeding should be monitored. Patients should be advised they might have a more prolonged course of swelling and healing.

References

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