

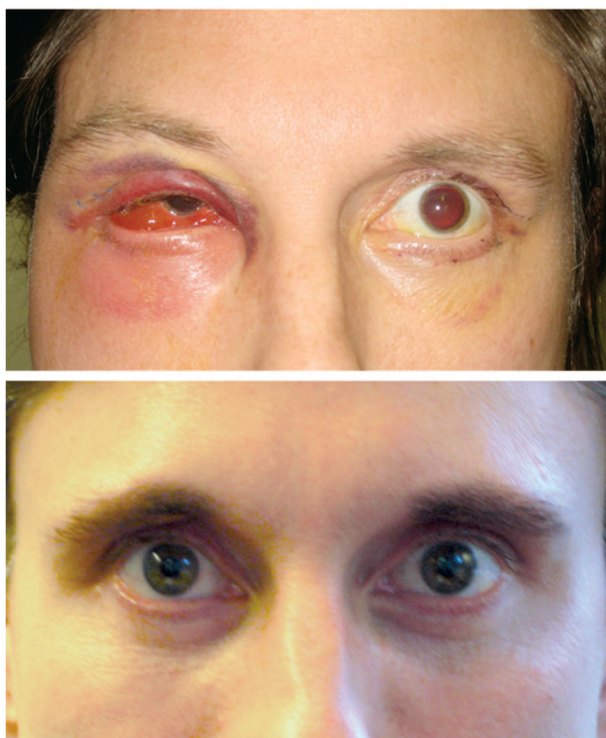


### Successful Management of Methicillin-Resistant *Staphylococcus aureus* Orbital Cellulitis after Blepharoplasty

Sir:

**A**lthough aesthetic blepharoplasty is a common surgical eyelid procedure, several complications have been reported, including rare instances of orbital cellulitis.<sup>1,2</sup> Methicillin-resistant *Staphylococcus aureus* infections are of particular concern. To our knowledge, this is the first report of methicillin-resistant *S. aureus* orbital cellulitis following aesthetic blepharoplasty.

A 40-year-old man sought aesthetic improvement for his upper and lower lids. His medical history was significant for a remote methicillin-resistant *S. aureus* cellulitis infection of the scalp and Kaposi sarcoma of the right leg that had undergone excision 10 years previously. He underwent an uncomplicated bilateral upper eyelid skin and fat excision and lower lid transconjunctival blepharoplasty. One gram of intravenous cefazolin was given 30 minutes before surgery. On postoperative day 6, the patient had worsening eyelid erythema and pain. On examination, the patient was afebrile and other vital signs were normal. Best-corrected visual acuity was 20/80 in the right eye and 20/25 in the left eye. Pupils were round and reactive, but the right eye dem-



**Fig. 1.** (Above) Right orbital cellulitis on postoperative day 4. Note the significant right eyelid erythema, severe conjunctival chemosis, and superomedial globe displacement. (Below) Clinical photograph obtained 1 year after successful management of right orbital cellulitis. Note the normal and symmetric upper and lower lid positions.

onstrated a mild to moderate relative afferent pupillary defect. The right eye was proptotic and chemotic, and demonstrated severe restriction of gaze in all directions (Fig. 1, *above*). Scant purulent discharge was noted from the conjunctiva. Intraocular pressures were 24 in the right eye and 14 in the left eye. The optic nerves appeared healthy. See Figure 2 for computed tomographic findings. Because of his prior methicillin-resistant *S. aureus* infection, the patient was started empirically on vancomycin, 1 g administered intravenously twice daily, rifampin 600 mg administered orally daily, and Tobradex drops to the right eye. Results of blood cultures were negative; however, wound cultures were positive for oxacillin-resistant *S. aureus* sensitive to vancomycin and Bactrim. Over the next 4 days, the patient's best-corrected visual acuity improved to 20/20; extraocular movements, edema, erythema, and pain gradually improved, and the right afferent pupil-



**Fig. 2.** (*Above*) Coronal computed tomographic scan revealing an ill-defined pocket of fluid accumulation within the right inferior orbit. (*Below*) Axial computed tomographic scan revealing preseptal soft-tissue swelling and enlarged lacrimal gland with some fluid accumulation along the right lateral orbit. The ethmoids and maxillary sinuses were normal and there was no intracranial extension.

lary defect resolved. The patient was then discharged on a course of Bactrim 80/160 mg by mouth twice daily for 10 days. A 12-month follow-up revealed a normal eye examination and symmetric appearing lids (Fig. 1, *below*). No surgical revisions were required and the patient was pleased with his cosmetic outcome.

Orbital cellulitis is a medical emergency that can lead to visual loss, cavernous sinus thrombosis, or even death.<sup>2</sup> Patients with orbital cellulitis should have a computed tomographic scan to evaluate the extent of disease and immediate treatment with intravenous antibiotics. Surgical intervention may be indicated if there is optic nerve compromise or evidence of an orbital abscess, or in cases refractory to treatment.

Methicillin-resistant *S. aureus* infections after aesthetic surgery are a growing concern.<sup>3</sup> Although several interventions have been proven to reduce the incidence of surgical-site infections, no decolonization regimen has proven efficacious in long-term methicillin-resistant *S. aureus* eradication.<sup>4</sup> The Centers for Disease Control and Prevention recommends against the routine use of vancomycin in antimicrobial prophylaxis and against routine universal active surveillance culturing for methicillin-resistant *S. aureus*.<sup>3,5</sup> However, screening groups of high-risk patients may be worthwhile in the future.

Prompt diagnosis is critical in the management of methicillin-resistant *S. aureus* orbital cellulitis, and antimicrobial prophylaxis may be considered for immunocompromised hosts or patients colonized with methicillin-resistant *S. aureus*.

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#### DISCLOSURE

*The authors do not have any financial interests to disclose.*

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