Atypical mycobacterial wound infection after blepharoplasty

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Despite numerous reports of atypical mycobacterial infections,¹⁻³ to our knowledge there have been no reports of atypical mycobacterial skin infections following oculoplastic procedures. We present a case of atypical mycobacterial wound infection after blepharoplasty.

Case report

A 72-year-old man underwent bilateral blepharoplasty for dermatochalasis. Four weeks later he noted increasing redness and swelling in the healed brow incisions. These swellings bled intermittently, scabbed over, and became progressively more prominent (Fig 1) despite treatment with cephalothin for 2 weeks. Because of the lack of response to this antibiotic, the patient was thought to have an atypical mycobacterial wound infection. Lowenstein-Jensen media were inoculated with the exudate of the wound and acid fast stains were obtained. The stain revealed several acid fast bacilli. There was growth on the media, which was identified as

Mycobacterium chelonae. The organisms were sensitive to amikacin and to imipenem. The patient was treated with intravenous amikacin, 7.5 mg/kg twice daily, and debridement of the incisions. Histopathological evaluation of the tissues revealed granulomatous inflammation. Ziehl-Neelsen stain and fluorescent auramine-O stain revealed the presence of several mycobacteria (Fig 2).

After 6 weeks of amikacin therapy the wounds had still not completely healed. Amikacin was discontinued, and treatment with intravenous imipenem, 500 mg three times daily, was begun. This regimen was continued for 12 weeks, with the addition of clarithromycin, 500 mg twice daily by mouth, during the last 4 weeks. The wounds gradually healed without further evidence of discharge.

Comment

This case represents an unusual occurrence of ocular adnexal infection caused by *Mycobacterium chelonae*. The clinical features of atypical mycobacterial cutaneous infections include a history of trauma, failure of surgical wounds to heal or breakdown of previously healed wounds, serous drainage from infected wounds, and outbreaks of infections from the same institution. Several factors predispose patients to develop cutaneous and ocular disease from *Mycobacterium chelonae*. These include traumatic introduction of organisms into tissues, presence of foreign material, contaminated gentian violet marking solution, contaminated needles, and syringes, or injectables, and improper sterilisation of instruments.⁴ Strict sterile technique was employed during surgery in the present case; needles and suture material from the operating room were cultured, but no organisms were isolated.

Mycobacterium chelonae tends to be resistant to the usual antituberculous medications, including cycloserine, but clarithromycin may be helpful in fighting infections caused by this organism.⁵ In addition to antibiotic therapy, debridement of the infected tissues is integral to the therapy of cutaneous atypical mycobacterial infections.

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Figure 1 Bilateral blepharoplasty wounds showing induration, breakdown, and crusting.

Figure 2 Light micrograph of debrided tissue showing infiltration of mononuclear cells, epithelioid cells, and an occasional giant cell (haematoxylin and eosin, magnification $\times 100$). Auramine-O stained section (inset) showing numerous rod-shaped bacteria (magnification $\times 240$).