

58th ANNUAL CDC EIS CONFERENCE: ORAL PRESENTATION

Outbreak of Rapidly Growing Mycobacterial Infections at an Ambulatory Plastic Surgery Center — California, 2007–2008

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Background: Outbreaks of rapidly growing mycobacterial (RGM) surgical site infections (SSI) are increasingly reported. These infections can be difficult to treat, requiring prolonged, targeted, antimicrobial therapy. In December 2007, an RGM SSI outbreak was reported among patients who had plastic surgery at a single surgeon-owned ambulatory surgery center (Center A). We investigated to identify the outbreak source and prevent additional cases.

Methods: Cases were defined as nonhealing surgical incisions or erythema, pain, and induration at the surgical site lasting >30 days among patients who had surgery at Center A during March 1, 2007–April 30, 2008. We interviewed patients about SSI symptoms and treatment and conducted prospective surveillance for RGM isolates from Center A patients through the local laboratory. We collected environmental specimens for mycobacterial culture, performed pulsed-field gel electrophoresis (PFGE) on patient and environmental isolates, and reviewed infection-control practices at Center A.

Results: We identified 14 cases, 12 through interviews and two through prospective laboratory-based surveillance. Eight patients had facial implants; three had breast implants; and three had facelifts. Among six patient RGM isolates, five were *Mycobacterium chelonae*, of which three matched by PFGE, and one was *Mycobacterium abscessus*. *Mycobacterium chelonae* was isolated from a surgical faucet, and *M. abscessus* from autoclave water. Patient and environmental isolates did not match by PFGE. Infection-control deficiencies at Center A included incorrect instrument and implant sterilization procedures and use of nonsterile tissue-marking agents during surgery.

Conclusions: Deficiencies in infection-control practices at Center A likely caused this outbreak. We directed the surgeon to correct deficiencies and hire a certified infection-control consultant. In California, infection-control regulation of physician-owned ambulatory surgery centers is lacking. Such

regulation might help prevent similar RGM SSI outbreaks.