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Think again about that pedicure

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A 30-year-old white man presented to our dermatology clinic complaining of a 1-month history of painful sores on both lower legs. He had seen his primary care provider, who had said that he had a *Staphylococcus aureus* infection and treated him with a course of moxifloxacin, with no improvement. The patient is an electrician and reported that the spots started as “chigger bites” when he was out on the job. After further questioning, he admitted to accompanying his pregnant wife to her bimonthly pedicure, and upon her request, he also had had a pedicure. Also of note, he reported shaving his legs periodically and had shaved them before having the pedicure.

Upon physical examination, the patient appeared healthy but had multiple 0.5-cm to 2.5-cm erythematous, subcutaneous, fluctuant nodules on his lower legs (see Figure 1). Two punch biopsies were performed, with one sample sent for hematoxylin and eosin stain and one sent for culture. The results showed acanthosis and a mixed inflammatory infiltrate consisting of neutrophils, lymphocytes, and histiocytes.

The likely cause of the nodules is

- Arthropod bites
- *S aureus* furunculosis
- Atypical mycobacterium
- Tinea with Majocchi's granulomas

Discussion

The culture grew out atypical mycobacterium, *Mycobacterium chelonae*, that further testing showed to be sensitive to clarithromycin and amikacin. More than a dozen species of mycobacteria can be transmitted by inoculation. This saprophyte is found in water, soil, dust, animals, and in the plumbing pipes of the chairs used for pedicures in many nail salons. These infections are frequently misdiagnosed because of their subtle or nonspecific clinical presentation, including cellulitis, nodules, or ulcers with necrosis. Sometimes multiple biopsy specimens must be sent for culture to obtain a correct diagnosis, and even

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FIGURE 1

Nodules on the lower leg



then negative results are possible. This patient required three biopsies before a diagnosis was made.

Clarithromycin was chosen for treatment. (We had three other patients who developed infections after visiting the same salon where this patient had a pedicure, and their cultures also grew *M chelonae* sensitive to clarithromycin.) We would have preferred to add a second agent to the patient's treatment, but amikacin, the other drug to which this form of *M chelonae* was sensitive, is available only in IV form. We kept the patient on clarithromycin alone and explained that he could expect to be taking this agent for at least 6 months because of the slow-growing nature of atypical mycobacteria.

Atypical mycobacterium must be considered in any patient with resistant “cold” abscesses. Patients should be advised to avoid soaking their feet in any whirlpool or “spa bath” chair before receiving a pedicure. □

SUGGESTED READING

- Kelley LC, Deering KC, Kaye ET. Cutaneous *Mycobacterium chelonae* presenting in an immunocompetent host: case report and review of the literature. *Cutis*. 1995;56(5):293-295.
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- Weitzel S, Eichorn P, Pandya A. Nontuberculous mycobacterial infections of the skin. *Dermatol Clinics*. 2000;18(2):359-377.