Pedicure Whirlpools May Swirl With Mycobacteria

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KOHALA COAST, HAWAII — Nail salons that offer pedicures may be peddling infections along with pretty toes.

If a female patient complains of recurrent folliculitis of the lower legs, ask if she's had a pedicure lately and if she shaves her legs before going to the nail salon. The shaved skin can be a portal of entry for mycobacteria that exist in tap water and that grow in the filter systems of whirlpool footbaths used in nail salons, said Timothy G. Berger, M.D.

"You can scrub the inside of the salon tub all you want, but it's in the filter and irrigation system, and you can't clean that," he said at a conference on clinical dermatology sponsored by the Center for Bio-Medical Communication Inc.

Pedicures are popular in the San Francisco Bay area. "We've had outbreaks affecting hundreds of patients with this," said Dr. Berger, professor of clinical dermatology at the University of California, San Francisco.

He described a typical patient: a 37-year-old woman referred to him by her primary care physician for chronic folliculitis of the lower legs who failed sequential treatment with ciprofloxacin, cephalexin, and amoxicillin combined with clavulanate potassium (Augmentin). She had multiple, firm, focally ulcerated and eroded lesions 0.5-1.5 cm in size below the knees. The dermal and subcutaneous nodules had left multiple scars.

A biopsy suggested she might have mycobacterial infection, and a culture of the tissue biopsy grew one of the rapidly growing types of mycobacteria, such as *Mycobacterium fortuitum* and *M. chelonae*, which can be seen in cultures in 7-10 days.

Some patients may be followed with observation, but they usually require a prolonged course of antibiotic treatment for 6 months. "If you're lucky enough to grow the bug, then you can get sensitivities" to help pick the antibiotic, he said.

If you don't know the bug's antibiotic sensitivity, treat with monotherapy using doxycycline, clarithromycin, azithromycin, or ciprofloxacin, he suggested. Sulfonamides and trimethoprim is another option. Depending on how the patient responds, combination therapy may be needed.

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These rapidly growing mycobacteria do not respond to antimicrobials used to treat tuberculosis, such as isoniazid or ethambutol.

Dr. Berger distinguished between the rapid growers such as *M. chelonae* and *M. fortuitum* and the two types of mycobacteria that dermatologists most commonly see. One, *M. marinum,* causes papules or plaques on the hands after exposure to water in fish tanks.

The other, *M. tuberculosis,* can cause tender calf nodules and erythema induratum, "which is not a rare disease," Dr. Berger noted.

Sometimes biopsies from patients with erythema induratum will show polyarteritis nodosa (PAN). If cutaneous TB is the cause, putting those patients on steroids will make them worse, Dr. Berger cautioned. When he sees a biopsy with PAN, he always does a TB screen. "About half of those patients are positive, and they clear when we treat their TB," he said.

If you see a patient who has risk factors for TB infection (such as Asian ethnicity or foreign birth) and PAN, think about cutaneous TB, Dr. Berger said. "It's still around. We've collected 20 cases over the last 10 years who came to our clinic with cutaneous TB." ■

Site Offers Seniors Advice on Shingles

The National Institute of Health's senior health Web site has added information about shingles. Adults over 50 years who have had chickenpox are at the greatest risk for contracting the skin disease. The Web site provides information about causes, risk factors, diagnosis, and treatments. For more information, visit http://nihseniorhealth.gov/shingles/toc.html. ■

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