

Heel Fissures

Practice the art of "heeling."

By Tamra B. Orr

*A number of my pedicure clients have thick calluses and cracked skin on their heels. How should I treat this problem?
—Trish*

Along with chilly winds, blowing snowflakes and vacation plans, winter usually brings extremely dry feet. Whether your client simply desires prettier feet during the cold months or wants to show off a pedicure on a cruise ship deck, nail techs need to keep an eye on feet. Dry, cracking skin on the heel, known as xerosis, results from thickening skin (calluses) combined with fissuring (cracking on the bottom of the heel). This condition can be a real nuisance to your clients or a serious health problem. Knowing the difference is important to provide your clients with the best service.

Calluses vs. Fissures

Calluses develop due to excessive pressure or friction on a particular area of skin over a long period of time. (A brief period of pressure or friction, in contrast, usually results in a blister.) If the callus isn't addressed, the callus itself can become a problem, and calluses on the heel can even crack.

Where the skin on the bottom of the foot (glabrous skin) and the skin on the side of the foot (hairy skin) meet, heel fissures can form. The fissures can wrap around the entire foot and heel but also may develop on one side of the heel only.

Finding the Cause

While one of the main causes of dry, cracking skin is the arid winter air, other factors can impact heels. Problems that contribute to heel fissures are:

- **Diabetes.** Diabetes can interfere with the body's ability to produce oils, making the skin less supple and more susceptible to extreme dryness.
- **Excess weight.** Carrying around too much weight can create problems because extra pounds equal extra pressure on the feet.

- **Standing for long periods of time.**

Prolonged standing can be a problem because of the added pressure.

- **Poor foot structures.** Poorly structured feet can sometimes lead to an abnormal gait that produces calluses on the heel.

- **Thyroid disease.**

- **Psoriasis.**

Going barefoot or wearing backless shoes—both easily preventable causes of cracked heels—allows the fat pad in the heel to expand more than usual. Wearing closed shoes with adequate support solves this problem.



COURTESY OSCAR MIX, D.P.M.

Severe callus buildup can lead to skin cracks and fissures.

Becoming A Softie

Keeping skin moisturized and supple is one of the most effective ways to prevent a heel fissure from developing. Traditional lotions and creams often aren't powerful enough for your clients to effectively treat their own severely dry skin. As Dr. Robert Brody, a podiatrist in New York, says, "Using typical skin creams for cracking heels is a lot like shooting a BB gun at a tank. The heel dermis is too thick for most over-the-counter lotions to be effective."

Podiatrist Dr. Oliver Zong of New York agrees. "Any lotion can help a mild crack. If the crack is more severe, however, the client will need an oil-based lotion or cream; you may have to direct her to a doctor for a prescription-strength treatment." According to Zong, some doctors will prescribe a cream that contains special ingredients, such as a urea concentrate or lactic acid, which help eat away at calluses.

Fortunately, professional nail manufacturers are producing new products that can moisturize, heal and protect a mild to moderate heel fissure.

Of course, some of the old standbys work too. Eating a diet rich in omega-3 fatty acids and drinking adequate amounts of water are essential to having soft and supple skin.

Determining the Severity

Just as you'll find a big difference between a cold and pneumonia, the difference between a dry, calloused heel and a severe heel fissure is dramatic. A mild crack in the skin can benefit greatly from a pedicure that both smooths (use a pumice stone) and moisturizes (apply lotions). A deep fissure, on the other hand, requires medical attention. How can a tech know the difference between the two? "If a person is in agony when she walks or if the crack looks like the Grand Canyon, it's time for medical help," says Dr. Robert Brody, a New York-based podiatrist.

Since no cure for heel fissures exists, the key is prevention.

Ask yourself and your client the following questions to help determine what you're working with:

Is your client in pain?

Does she wince when you hold and/or move her foot?

Do you wince when you look at the affected skin?

If you or your client answered yes to any of these questions, suggest to your client that she visit her doctor before infection sets in.

"Xerosis definitely carries a high risk of infection and can certainly cause pain," adds New York podiatrist Dr. Oliver Zong.

Patti Glick, RN, also known as The Foot Nurse, says, "When cracks are superficial,

using a pumice stone after soaking to soften the calluses around the cracks is safe. If the cracks are deep or bleeding, the client should be referred to a podiatrist."

Glick also emphasizes the extreme importance of proper sanitation when working with patients who have cracked skin. "I would stress that the salon staff should sanitize the footbaths and basins after *each* client, *not* simply at the beginning of each day. One daily sanitation is not enough to protect anyone from fungus and other infections," she says.

Finding a Treatment

Since no cure for heel fissures exists, the key is prevention. Some physicians recommend moisturizing the skin on the feet and heels at least twice a day. For mild cracks, paraffin treatments, pumice stones and brushes can help minimize calluses. Regular pedicures definitely help soften skin; an at-home maintenance regimen can help the healing process as well. Zong recommends that your clients apply a thick moisturizer to feet at night and wear socks to bed to help the product penetrate.

Many of the people walking around today have calluses on their feet. Sometimes those calluses turn into fissures and, when they do, nail techs need to know how to provide clients with the proper service and advice. The answers are important to pedicurists and podiatrists alike, and knowing them will make you an even more valuable professional in your clients' lives. ↓

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