

# Soft and Brittle Nails

Don't bend over backwards looking for the causes behind these common nail conditions.

**D**o you have a client whose nails bend easily? Or maybe one whose nails are so dehydrated that they're impossible to bend at all? Perhaps you've encountered someone with nails that have furrowed or split. This Nail Clinic will explore how to identify such problematic nails when they come across your table, including causes and cures that you can recommend to clients to return their nails to pristine condition.

## Facts About Soft and Brittle Nails\*

- Soft nail disease was first observed in a 33-year-old woman in late-1970s Italy.
- The normal water content in nails is approximately 18 percent. Nails become brittle when the water content drops below 16 percent.
- Brittle nail syndrome affects about 40 million Americans.

**\*Sources: "An Unusual Congenital Nail Dystrophy," Prandi & Caccialanza, 1977; "Brittle Nails," Scher & Bodian, 1991**

## Soft Nails (Onychomalacia)

Nails are formed by keratin growth in the nail plate, and the rigidity of nails depends on the arrangement and orientation of the keratin fibers. If that keratin starts to break down, the result is soft nails, or onychomalacia. (Note: Onychomalacia shouldn't be confused with soft nail disease, a separate condition in which all the nails of the toes and fingers atrophy.) You can spot onychomalacia in a client whose nails are easily bendable, thinner than normal, split or broken. Sometimes they may appear to be nearly translucent and bluish in tone.

Soft nails are caused by a myriad of factors. They're most commonly associated with too much exposure to water. Some reports even suggest that washing hands too often in hot water causes nails to swell, which results in shrinkage upon drying. (Think

about how the pads of your fingers prune up after a shower or bath.)

Other factors that cause soft nails include medical conditions such as nutritional deficiencies, specifically magnesium; endocrine disorders, such as thyrotoxicosis, a condition of the thyroid gland; and a skin ailment known as psoriatic arthritis. As a nail tech, it's difficult for you to determine the cause of soft nails, be it internal or external, but you can make simple suggestions about small daily changes that may help your clients.

One way to help your client is to limit her exposure to water during services. Try waterless services and add-on treatments that provide intense moisture. Also, retail lotions and cuticle oils to her, as well as a nail hardener, so she can keep up the regimen at home. Go further and explain that a proper diet helps prevent soft nails; suggest that she eat the right amount of vegetables, legumes and whole grains, accompanied by

multivitamin and mineral supplements—especially those that contain biotin—which are thought to help soft nails.

One last—and very important—suggestion is that she wear gloves to protect her hands when cleaning, and to limit the number of times she washes her hands in hot water. (Antiseptic hand gels can help if she's worried about contracting germs.) If her nails remain unchanged, she should check with a doctor to see if the condition indicates a medical problem. And of course, be careful about working with clients whose soft nails may have resulted in painful splits that affect the hyponychium and nail bed—it's best to refer them to a physician.

### Brittle Nails (Onychorrhexis)

If your client's fingernails do not bend when you squeeze them gently along the sides, she may have brittle nails (onychorrhexis), a condition that is characterized by splitting or breaking at the tip and often along



**Brittle nails can sometimes contain ridges.**

the length of the nail, as well as furrowing along the nail plate. It also causes the nail to appear thin, glossy or dry. Nail abnormalities, such as long striations or ridges on the nails and splitting nails (onychoschizia), are not only painful, but also cosmetically unappealing.

This condition affects about 20 percent of people and occurs twice as often in

women as it does in men. It's thought that the bridges between nail corneocytes—the flattened cells on the surface of the nail—are weaker in women than in men, and that repeated exposure to water reduces those bridges. Just as with soft nails, brittle nails develop due to frequent hand washing, especially when the water is hot, although some doctors also assert that dehydration results in spaces growing between nail cells.

“General therapies to treat brittle nail syndrome include increasing and retaining water content in the nails by soaking them nightly and applying moisturizer, and decreasing the irregularities of the nail by gluing fractures and splits with acrylic glues,” writes Dr. Richard K. Scher, M.D., in a study appearing in the October 2005 issue of the *Journal of the American Academy of Dermatology*. But remember, you shouldn't be your client's only source of treatment—when these more severe conditions appear at your station, always refer the client to a physician.

Onychorrhexis is also seen in people who experience prolonged contact with irritating substances such as detergents, lye or nail polish remover. Studies show that workers who are exposed to gasoline can develop brittle nails, which is thought to occur due to a decrease in nail lipids. They can also be found in older clients as a consequence of aging; those who suffer from hemochromatosis, a liver disease

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caused by increased storage of iron in the body; and patients with severe cases of hair loss known as alopecia areata. In a 2004 article titled "Nail Fragility Syndrome and Its Treatment" from the *Journal of Cosmetic Dermatology*, authors Robert Baran and Creative Nail Design chief scientific officer Doug Schoon say that additional causes for brittle nails include hypochromic anemia, iron deficiency anemia, peripheral vascular conditions and endocrine abnormalities. Onychorrhexis can also be a result of genetic disorders, such as a severe form of Darier's disease, which is a hereditary condition of the skin.

When clients come to you complaining about the difficulties of their brittle nails, there are a couple of things you can do. Suggest vitamin B complex, biotin and a nail hardener (one that includes urea, not formaldehyde), which work well as treatments. But a big part of dealing with brittle nails is prevention. Keep natural nails short, and recommend that clients protect their hands when working with any kind of harsh chemicals—even going so far as to use plastic gloves over cotton ones. Treatment of the underlying condition is also essential. If these preventative measures don't work, clients should be referred to a doctor, especially if nails are painful or the splitting is deep.

Soft and brittle nails are two separate conditions, but with remarkably similar causes. By keeping your clients' nails healthy and moisturized, you may be able to prevent these painful problems from ever landing at your station. But if they do, you're now armed with the information you need to help your clients

pinpoint the cause behind the problem and refer them to the proper treatment. This will help everyone's nails bounce back into prime condition—and right back into your chair. ♣

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