

3 Mahoney Ave. Rutland, VT 05701 (802) 773-3553 www.rutlandskin.com Daniel P. McCauliffe, M.D.

The fingernail and toenail areas consist of several different parts, including the nail plate (hard part), the nail bed (skin beneath the nail plate), the cuticle (the skin that covers the base of the nail plate), and the nail folds (the skin on the sides of the nail plate).

☐ *Ingrown toenails* are often caused by improper nail trimming, wearing shoes that are too tight, and nail disorders that cause a corner of the nail to curve downward into the skin. They can be painful and sometimes even lead to infection. Treatment may involve soaks, antibiotics, and nail surgery. It is important to wear well-fitting footwear. Don't cut your nails too short or pull the "hangnail" edges back as these can cause the nails to become ingrown.

**Fungal infections** of the nails usually are associated with color changes and nail thickening that sometimes causes the end of the nail to separate from the nail bed. Toenails are affected more often than fingernails. Fungal infection of the surrounding skin on the feet (e.g., athlete's foot) may also be present. Before treatment, laboratory confirmation of the infection is usually first done on nail clippings and nail bed scrapings to look for fungal organisms. If the first test is negative, it is often repeated, as sometimes the results are falsely negative. If the results are positive, the nails are usually treated with a topical antifungal for up to 48 weeks or antifungal pills for 3 to 6 months. If only one or two nails are affected, or are causing discomfort, they can be removed by a chemical method, and then allowed to grow back. An infection under a loose nail can sometimes be treated by keeping the nails dry and applying 4% thymol in ethanol, four times daily (particularly right after they have been in contact with water, and at bedtime). See our handouts on treating athlete's foot and nail fungus available @ www.RutlandSkin.com

**Paronychia** result from an infection that takes hold under the skin around the nail. They present as a tender red swollen bump that sometimes drains pus. Keeping the nails dry and applying an antiseptic solution (e.g., 4% thymol in ethanol four times daily, particularly after they have been in contact with water, and at bedtime) helps, and antibiotic pills are sometimes needed to clear this infection. Avoiding prolonged contact with water and allowing the cuticle to grow out over the nail can be helpful in preventing recurrences.

**Tumors and warts** can be found in or around any portion of the nail. The nail plate can change shape or even be destroyed as a result of tumor or wart growth. Warts are a type of viral infection of the skin that can spread and become painful. Treatment of warts usually involves freezing or chemical application for removal. If the wart or tumor extends under the nail plate, the nail may need to be removed to gain access to affected area. Tumors are usually biopsied for microscopic analysis to find the cause. This helps us select the best treatment.

**Psoriasis** can cause pitting, rippling or discoloration of the nail, separation of the nail from the nail bed, crumbling and/or splitting of the nail, as well as swelling and redness of the skin surrounding the base of the nail. Treating nail psoriasis isn't easy as topical creams and ointments are usually ineffective. Pills or shots may be required.

**Habit Tic** is a habit of frequent picking or rubbing at the nail or the cuticle. This can lead to an abnormal appearing nail. Patients need to break their habit of picking or rubbing at the nail(s). Covering the nail with tape may help protect them from repeated injury and help break the habit.

**Brittle or split nails** can result from frequent contact with water, detergents and (or) chemicals (including nail polish remover and artificial nails). Brittle nails can also be a sign of aging or thyroid disorders. A thyroid blood test can be done to see if you have a thyroid disorder. Non-prescription creams containing 10 to 25% urea can be applied once or twice daily to the nails to help soften them. Biotin pills, available in most pharmacies, may also help strengthen brittle nails (2.5 mg per day dosage). However STOP the biotin 5 days before blood testing as biotin can cause inaccurate results in some tests. See our Winter 2023 Newsletter @ www.RutlandSkin.com for some of the lab tests that biotin interferes with. Keeping the nails cut short can help prevent splitting. Protecting the nails from contact with water (e.g., wearing cotton-lined rubber gloves when doing household chores) can also be helpful. DermaNail and other non-prescription products for treating brittle nails are available in local pharmacies, Walmart and @ Amazon.com).