



## NAIL CONDITIONS

The nail unit is not only a very important but also a much overlooked and neglected anatomical structure. It is composed of the nail matrix (growth center of the nail), the nail plate (cosmetic component upon which enamel is placed), the nail bed (skin-like portion beneath the nail plate and the most common site for fungal infections), and the proximal and lateral nail folds - often the sites of difficult to treat paronychias (inflammation around the nail).

While nails have a major cosmetic function in our society -- about 8 billion dollars are spent annually in the United States on nail cosmetics -- they also do several other important things:

- Enhance fine touch sensation
- Protect the distal portion of the digits
- Essential for picking up small objects (try buttoning a shirt with extremely short nails!)
- Make efficient offensive and defensive weapons for those so inclined.

The nail unit is a very strong and hardy anatomical entity; nevertheless, it is subject to many medical problems.

- **Onychomycosis:** The most common nail condition, by far, is fungal infection of the nail which accounts for roughly 50% of nail abnormalities. Fortunately, there are now effective antifungal agents to treat this difficult malady.

- **Neoplasms:** It is important to be aware that the nail unit is also subject to very serious malignancies, as is the case with the skin, but physicians sometimes forget this possibility. For example, squamous cell carcinoma is not uncommon and can resemble a simple wart. Nail melanoma also occurs but this is not always mentioned in publications on diagnosis and treatment of melanoma.

- **Psoriasis:** Much is said about skin lesions in psoriasis, but there is a tendency to omit discussions about nail psoriasis, where the nails may be pitted and brittle. The latter often interfere with hand function, when fingernails are afflicted, and with walking, if the toenails are involved. Localized nail psoriasis responds well to intralesional corticosteroids, and the nails also do well in those patients who require biologics for more severe skin disease.

- **Systemic disease:** The nail unit often is an indicator of systemic disease (liver, kidney, cardiac, and many others), as well as a frequent casualty in hereditary disorders and syndromes.

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