

## A Day in the Life of a Nail Expert

In this month's column, Dr. Stern quizzes you on your knowledge of a range of nail disorders and examines the characteristics of each.

## BY DANA STERN MD

This month, I thought it would be fun to test your knowledge of nail disorders. Some of these conditions are quite unusual, so don't feel badly if you don't know them at first glance. My hope is that you will learn some new nail diagnoses and know when it is appropriate to refer your client to a physician.



## **NAIL PATELLA SYNDROME**

is an inherited, autosomal dominant condition [meaning it can be inherited from just one parent] that can result in bony abnormalities, including an absent or small knee, hyperextensible joints, as well as eye changes, including cataracts and glaucoma, among several other potential clinical features. The nail changes are very distinct and unique. The classic nail feature is a triangular lunula (the normal halfmoon appears triangular instead of rounded). This nail feature is often what tips off the diagnosis, so it is important to recognize.

KOILONYCHIA, also known as spoon nails, appears concave so that you could imagine a drop of water filling the nail plate as if balancing within a spoon. When the nails develop this feature, it is important to assess blood work to look for iron metabolism-related diseases. The most common association is iron deficiency anemia, but there are other more obscure entities associated with spoon nails such as hemochromatosis. Raynaud's disease can also cause these nail changes.

**HEMORRHAGIC ONYCHOLYSIS** is a condition that is usually associated with a specific type of chemotherapy. The nails are not only lifted or separated off of the nail bed, but they develop bleeding (hemorrhage) under the nail as well. This condition can be extremely uncomfortable for the patient and requires medical attention. It is important for cancer patients or any person who is immunosuppressed to be especially cautious about infection risks. Any client with separated nails should seek treatment by a dermatologist and avoid nail cosmetics until the problem is completely resolved.





**BEAU'S LINES** are transverse [horizontal] depressions in the nail plate that represent a period where the nail stopped growing. The nail can experience a cessation of growth due to a stressful event or illness. In recent years, there has been a strain of Coxsackie virus that causes this phenomenon relatively commonly in children who have the virus. The nail will develop an indentation and often subsequently shed. A new, normal nail will replace the abnormal nail.

**RED SPOTTED LUNULA** is a feature that has been associated with several different conditions including psoriasis, lichen planus, and alopecia areata. The features are very distinct: The normally white lunula appears to have pinpoint red dots throughout. The example shown here is a case of nail psoriasis where other features include pitting and oil spots, all of which are consistent with nail changes associated with psoriasis.

**NAIL MELANOMA** is a rare type of cancer that can occur within the nail unit. Just like the skin, the nail has melanocytes that are capable of producing pigment. In fact, it is extremely common to see benign, non-worrisome pigmented bands in the nails of people with darker skin types simply because they tend to have more melanocytes. The nail can also at times develop a mole which is a nested cluster of melanocytes. Rarely, when moles start to grow in an atypical, uncontrolled fashion, they can progress to become melanoma, a serious and potentially deadly form of cancer. A new brown-to-black, pigmented band on a single digit in an adult should be evaluated by a board-certified dermatologist.

**HABIT-TIC DEFORMITY** is an acquired habit-induced condition of the nails resulting from the repetitive habit of picking or pushing the cuticle of the thumbnail back. You can see a series of parallel, transverse depressions along the center of the nail plate in a socalled "washboard" configuration. Additionally the lunula (half-moon) is often enlarged. There is always a ragged or absent cuticle and the patient may or may not be aware of the habit. Any repetitive trauma to the cuticle can ultimately result in the abnormal outgrowth of the nail because the cuticle directly overlies the nail matrix and the nail matrix is what becomes the actual nail. Therefore, overly aggressive cuticle removal or even pushing back of the cuticle can, when repetitive, affect the cosmetic appearance of the nail.

**LICHEN PLANUS** is an inflammatory disorder that can involve the skin, mucous membranes, hair, and nails, but nail disease most commonly occurs in the absence of skin or mucosal involvement. Unfortunately, nail lichen planus tends to have a chronic course and



affects quality of life due to its visual appearance and impairment of manual activity. Clinical features can vary, but the classic appearance is that of nail plate thinning, as shown in the photo. When the disease progresses rapidly and aggressively, permanent scarring can result.

**DIGITAL MUCOUS CYST** goes by many names, including myxoid cyst, mucoid cyst, mucinous pseudocyst, synovial cyst, cutaneous myxoid cyst, periungual ganglia cyst, ganglion cyst, and digital myxoid cyst. It's the second most common nail tumor, warts being the most common. These benign cysts tend to occur between the distal [outermost] joint and the beginning of the nail. As a result of compression on the new nail, the nail plate often develops a longitudinal groove. At times, a clear, viscous fluid will be apparent. The majority of patients who have these cysts also have osteoarthritis of the adjacent joint.



Stern

Dermatologists treat skin, hair, and nails. As a board-certified dermatologist and nail specialist, I treat a

wide array of nail disorders including nail infections, inflammatory diseases of the nail, cosmetic issues related to the nail, cancers of the nail, and sports-related nail injuries.

- Read previous "Day in the Life" articles by Dr. Stern at www.nailsmag.com/ danastern.
- You can contact Dr. Stern with your questions via Facebook (Facebook.com/ DrDanaBeauty).
- Twitter (@DrDanaBeauty)
- Visit her at www.drdanastern.com and www.drdanabeauty.com.

## **ACQUIRED DIGITAL FIBROKERATOMA** is a

benign fibrous tumor that often appears on the hands and feet as a flesh-colored projection. When they arise from the nail, they often appear under the nail fold. Often they occur as a result of trauma.

**PYOGENIC GRANULOMA** is a small, eruptive, usually

solitary, friable [crumbly] benign papule [raised lesion] that can occur on the skin, mouth, and nails. When located on the nail, they can appear under the nail, within the nail bed (as in this photo), or next to the nail at the nail fold. They commonly bleed and can be quite bothersome as a result. Pyogenic granulomas can be associated with pregnancy, trauma, and a number of medications, including certain chemotherapy drugs. N

