How Ectodermal Dysplasias Can Affect Nails

Just as there are many different types of ectodermal dysplasias, there are also many different nail changes that can occur in association with these conditions.

The nail is a complex structure that is formed from the layer of the developing body known as the ectoderm. Not all people who are affected by ectodermal dysplasias will have changes to their nails. In fact, the nails in some types of ectodermal dysplasia may be quite normal.

The nails may be
- poorly developed,
- small,
- thick or thin, brittle,
- discolored,
- cracked,
- abnormally curved, or
- ridged.

In addition, they may
- grow slowly or shed periodically
- develop light spots, lines, or patches.
Nail Issues by Syndromes

- **Ankyloblepharon-ectodermal dysplasia-cleft lip and/or palate (AEC) syndrome** - The nail changes in AEC syndrome are even more widely variable and include absent or disappearing nails, thinned or thickened nails, irregularly shaped nails, and nails with an uneven edge.

- **Clouston syndrome** - The nails can be thick and discolored with very slow growth, and they can also lift up off the finger.

- **Ectrodactyly-ectodermal dysplasia-clefting (EEC) syndrome** - EEC can also affect the nails, which may include absent nails, thickening of the nails or small pits in the nails.

- **Focal Dermal Hypoplasia (Goltz) Syndrome** - The nail changes in Goltz syndrome are quite varied and can include absent nails, but the most common features are typically ridging and splitting of the nails, along with V-shaped notches at the end of the nails.
• Hypohidrotic Ectodermal Dysplasia (HED)
  - The most common nail changes seen in people affected by HED are typically thin nails.

Nails with any irregularities are prone to infection. The nails and surrounding cuticle area may become infected by fungus, yeast or bacteria. If this occurs, nails may become thick or discolored, and the area may develop a bad odor, or become swollen and tender.

Go to Treat/Medical Treatment Options to learn about how to treat nail issues. Or, visit our Library at www.NFED.org to find more detailed information about nail issues in the ectodermal dysplasias and their treatment.