# How Ectodermal Dysplasias Can Affect Teeth

There are many different ways that ectodermal dysplasias can affect teeth. This article covers the most common.

### Missing Teeth

In many of the ectodermal dysplasias, affected individuals many have missing teeth (hypodontia). This can be a few missing teeth to complete absence of teeth (anodontia). The pattern of missing teeth is syndrome-specific. This means, within a specific syndrome, the teeth involved are usually the same in one affected individual as in another individual with the same disorder. Although, there can be variations or wide differences within a syndrome.





### Parts of the Tooth

The tooth has two parts. The crown of a tooth is the part which is covered with enamel and is the part visible in the mouth. The crown is what you see when you smile or open your mouth. The root is the part embedded in the jaw. It anchors the tooth in its bony socket and is normally not visible.



### **Ename**

Enamel is the hard outer layer of the crown. Enamel is the hardest substance in the body. Enamel, the first layer of the crown, is the part of the tooth that is derived from the ectoderm. Therefore, enamel problems may occur in ectodermal dysplasias. The enamel may be thinner and softer than average. The thin, soft enamel may lead to increased cavities. There could also be small pitted dentations in the enamel. Problems with enamel can also cause discoloration of the tooth.



### Decreased Saliva

In some forms of ectodermal dysplasia, the saliva (spit) production may be reduced leading to dry mouth, which may also put the individual at increased risk for tooth decay.

### Dentin

Dentin supports the enamel on teeth. It's a yellow bone-like material that's softer than enamel and has nerves that tell you when something is going wrong inside your tooth. The dentin is not usually affected in ectodermal dysplasias.



## Shape

The structure of the teeth can also be affected. The teeth may be globe-shaped and smaller than average. Teeth that are smaller than average often are described as being conical, tapered, or pegged in shape. Sometimes the tooth can be very pointed and could be sharp creating problems.

Again, the root is the part embedded in the jaw. It anchors the tooth in its bony socket and is normally not visible. The center of the tooth between the crown and the tooth's root canals (pulp chambers) in some ectodermal dysplasias are larger than average. This gives the roots an abnormal shape (taurodontia).

# **Eruption**

Teeth may come in later than expected. The pattern that they come in may be different than the normally expected. The position of the teeth and jaw may be also abnormal in ectodermal dysplasias.

### Alvoeolar Ridges and Bone

When teeth are absent, the ridge like border of the upper and lower jaws containing the sockets of the teeth (alveolar ridges) are often underdeveloped. Development of the alveolar bone accompanies tooth bud formation. Without tooth bud formation, alveolar bone formation is abnormal. Lack of alveolar bone and teeth can result in a narrow, pointed chin. Missing teeth and lack of alveolar bone can also cause speech problems and difficulty with chewing and swallowing.

The dental challenges of individuals affected by ectodermal dysplasias can be very complex. They require of team of dental specialists to manage the treatment. Review A Dental Guide to Ectodermal Dysplasias and the Parameters of Oral Health Care for Individuals Affected by Ectodermal Dysplasias for more information. Contact us with any questions or for help in finding a provider to manage your treatment.





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