



## Ectrodactyly its Types and Ways of Treatment

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ABSTRACT

Ectrodactyly (polydactyly) is a genetic limb developmental disorder in which the hands or feet have an unusual shape and/or extra toes. This developmental disorder occurs during pregnancy when the limbs are still forming.

**Keywords:**

ectrodactyly, polydactyly, PPD-improved toe proliferation, SPD-reduced toe proliferation, HPPD-erctodactyly, TD-transversal deformity

**Introduction.** There are several types of erctodactyly, depending on which limb and how many fingers are affected:

1. Promotional proliferation of the fingers (PPD) is a disorder in which the limbs have additional fingers, most often small and nonfunctional. It is the most common type of erectodactyly. Enhanced proliferation of the fingers (PPD) is a type of erectodactyly in which the limbs have extra fingers, most often small and nonfunctional. PPD can affect one or both limbs and can also be hereditary or an accidental disorder. PPD can appear in different forms, depending on the number and shape of the extra toes. For example, the extra toe may be fully developed, with all the bones, joints, and muscles, or it may only be a small skin protrusion without developed internal structures. Patients with PPD may have extra toes at different heights or angles relative to the other fingers, which can make it difficult to put on or put on shoes. Some forms of PPD may not affect the functionality of the limb, while others may cause significant problems with motor activity. Treatment for PPD may include surgical

removal of the extra toes, especially if they cause discomfort or impede the functionality of the limb. However, the decision to undergo surgery is made on a case-by-case basis, and may depend on many factors, including the patient's age, the shape and severity of the lesion, and the presence of other medical problems. After surgery, patients may require rehabilitation therapy to restore full function to the limb.

Reduced finger proliferation (SPD) is a disorder in which limbs have fewer fingers than usual. For example, a hand may have only one finger that is the shape and size of several normal fingers. Reduced finger proliferation (HPPD) is a type of erectodactyly disorder in which the limbs have fewer fingers than usual. HPPD can affect one or both limbs and can be hereditary or an accidental disorder.

HPPD can appear in different forms depending on the number of toes that are missing or incompletely formed. For example, polydactyly is the opposite of HPPD, in which there is an extra number of fingers on the limbs.

In patients with HPPD, missing or partially formed toes can lead to restricted limb movements and functional impairment. For example, missing fingers can make it difficult to perform certain tasks, such as holding objects or using tools. Treatment of HPPD may include surgical correction or prosthetic replacement of the missing fingers. In some cases, specially fabricated prostheses can help improve the functionality of the limb and improve patients' quality of life. However, the decision to undergo surgery is an individual one, and can depend on many factors, including the patient's age, the shape and severity of the lesion, and the presence of other medical problems. After surgery, patients may require rehabilitation therapy to restore full functionality to the limb. Transversal deformity (TD) is a disorder in which the fingers are normally shaped but positioned in an unusual position. For example, the finger may be inverted or pointing to the side.

Polydactyly syndrome is a disorder in which ectodactyly is combined with other medical problems such as developmental delays, mental retardation, and others. Transversal deformity (TD) is a condition in which the limbs have an unusual shape caused by a deformity in the transverse direction. TD can affect the arms, legs, or both limbs. It may be hereditary or occur as a result of intrauterine injuries or other medical conditions. Patients with TD usually have difficulty performing certain tasks related to the use of the limb. For example, finger deformities can make it difficult to hold objects or use tools, and foot deformities can make it difficult to walk or stand. Treatment for TD may include surgical correction or wearing specially made orthotics. However, the treatment decision depends on many factors, including the shape and severity of the deformity, the patient's age, and the presence of other medical problems. In some cases, patients may require rehabilitation therapy to restore full function to the limb. If TD is hereditary, a family analysis can help identify the risks of the condition in other family members. Also, patients with TD may contact genetic counselors for advice and guidance on the risks of passing the condition on to future generations.

In ectodactyly, the arms and legs may be affected in different ways, and both limbs may be affected or only one limb may be affected. Some forms of ectodactyly can have a significant effect on limb functionality, while others may not be as pronounced.

**Conclusions:** The diagnosis of ectodactyly is made on the basis of the clinical examination and radiological studies. Treatment depends on the type and severity of the lesion and may include surgical, orthopedic, rehabilitation, and genetic methods. Treatment decisions are made on an individual basis for each patient.

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