



[Home](#) → [Medical Encyclopedia](#) → Ectodermal dysplasias

URL of this page: //medlineplus.gov/ency/article/001469.htm

Ectodermal dysplasias

Ectodermal dysplasias is a group of conditions in which there is abnormal development of the skin, hair, nails, teeth, or sweat glands.

Causes

There are many different types of ectodermal dysplasias. Each type of dysplasia is caused by specific mutations in certain genes. Dysplasia means abnormal development of cells or tissues. The most common form of ectodermal dysplasia usually affects men. Other forms of the disease affect men and women equally.

Symptoms

People with ectodermal dysplasia have a lack of sweat glands. This means they may not sweat or sweat less than normal.

In children with the disease, their bodies may have a problem controlling fevers. When the skin cannot sweat, it is hard for the body to control temperature properly. So even a mild illness can cause a very high fever.

Adults with the disease can't tolerate a warm environment. Air conditioning and other measures are needed to keep a normal body temperature.

Depending on which genes are affected, other symptoms may include:

- Abnormal nails
- Abnormal or missing teeth, or fewer than normal number of teeth
- Cleft lip
- Decreased skin color (pigment)
- Large forehead
- Low nasal bridge
- Thin, sparse hair
- Learning disabilities
- Poor hearing
- Poor vision with decreased tear production
- Weakened immune system

Exams and Tests

Tests that may be done include:

- Biopsy of the mucous membranes
- Biopsy of the skin
- Genetic testing (available for some types of this disorder)
- X-rays of the teeth or bones may be done

Treatment

There is no specific treatment for this disorder. Instead, symptoms are treated as needed.

Things you can do may include:

- Wear a wig and dentures to feel more comfortable about appearance.
- Use artificial tears to prevent dry eyes.
- Use saline nose spray to remove debris and prevent infection.
- Take cooling water baths or use water sprays to keep a normal body temperature. Water evaporating from the skin replaces the cooling function of sweat evaporating from the skin.

Support Groups

These resources can provide more information on ectodermal dysplasias:

- National Foundation for Ectodermal Dysplasias -- www.nfed.org [<https://www.nfed.org>]
- NIH Genetic and Rare Diseases Information Center -- rarediseases.info.nih.gov/diseases/6317/ectodermal-dysplasia [<https://rarediseases.info.nih.gov/diseases/6317/ectodermal-dysplasia>]

Outlook (Prognosis)

If you have a common variant of ectodermal dysplasia, this will not shorten your lifespan. However, you may need to pay attention to temperature changes and other problems associated with this condition.

Possible Complications

If untreated, health problems from this condition may include:

- Brain damage caused by increased body temperature
- Seizures caused by high fever (febrile seizures)

When to Contact a Medical Professional

Contact your health care provider if your child shows symptoms of this disorder.

Prevention

If you have a family history of ectodermal dysplasia, and you are planning to have children, genetic counseling is recommended. Often, it is possible to diagnose ectodermal dysplasia while the baby is still in the womb.

Alternative Names

Anhidrotic ectodermal dysplasia; Christ-Siemens-Touraine syndrome; Anodontia; Incontinentia pigmenti

References

Abidi NY, Martin KL. Ectodermal dysplasias. In: Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. *Nelson Textbook of Pediatrics*. 21st ed. Philadelphia, PA: Elsevier; 2020:chap 668.

Narendran V. The skin of the neonate. In: Martin RJ, Fanaroff AA, Walsh MC, eds. *Fanaroff and Martin's Neonatal-Perinatal Medicine*. 11th ed. Philadelphia, PA: Elsevier; 2020:chap 94.

Review Date 7/1/2023

Updated by: Ramin Fathi, MD, FAAD, Director, Phoenix Surgical Dermatology Group, Phoenix, AZ. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

Learn how to cite this page



Health Content
Provider
06/01/2028

A.D.A.M., Inc. is accredited by URAC, for Health Content Provider (www.urac.org). URAC's [accreditation program](#) is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s [editorial policy](#), [editorial process](#), and [privacy policy](#).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Links to other sites are provided for information only – they do not constitute endorsements of those other sites. No warranty of any kind, either expressed or implied, is made as to the accuracy, reliability, timeliness, or correctness of any translations made by a third-party service of the information provided herein into any other language. © 1997-2025 A.D.A.M., a business unit of Ebix, Inc. Any duplication or distribution of the information contained herein is strictly prohibited.



National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894 U.S. Department of Health and Human Services

National Institutes of Health