

Itching

Definition

About 330 years ago the physician Samuel Hafenreffer said that itching was "an unpleasant feeling that provokes scratching". Up to now there has been no better definition. The technical term for it is "Pruritus", from the Latin word "prurire" meaning burning.

What causes itching?

Although itching is a very agonising skin sensation, appearing with many skin diseases, only little is known about the mechanisms causing it. The skin contains so-called "receptors" (this can best be translated by "perception points") for different sensations like pain, cold, warmth or pressure. For a long time the parts responsible for the sensation of pain have been thought to be those causing itching, pain and itching being two varieties of the same sensory perception. But one great difference is that itching can only be triggered in the skin.

In the meantime latest scientific findings have pointed out that perhaps there are independent nerves for itching but not all communicating substances and their interplay are known. The phenomenon of the starting of itching has not yet been solved.

Normally itching is answered by scratching or rubbing. This is followed by inflammatory reactions of the skin, which causes the distribution of Histamine (a so called transmitter) and other substances increasing inflammation, and the consisting itching is intensified. All of us have had this experience, for example after a gnat-bite: you scratch and scratch and feel a short relief, but when you stop scratching it itches more than before. Then you go on scratching...

Reason

What ever the sensational points may look like, in every case a stimulus (it can be mechanical or chemical) has to be produced on them. Mostly an inflammation of the skin causes the itching. The transmitters of the inflammation cells, especially Histamine, produce the itching by stimulating the sensational points. The stimulus is first lead to the spinal cord by nerve fibres and then to the cerebrum where it is perceived as itching.

The itching mechanism can be started by:

- all kinds of skin inflammations
- medicine and food
- environmental allergens (e.g. pollen of flowers and grass)
- immune- or allergy substances (antibodies, lymphocytes)
- substances from insects and parasites
- contact substances (allergens like dyeing, perfume, scents)
- persistent skin damages (desiccation, sun burn)
- metabolic products from internal diseases

- psychic stress (works as an intensification)

Itching can be seen in many varieties of EB. People with EB Simplex Dowling-Meara are especially afflicted but it can also become a great problem with a junctional and dystrophic form.

The main reasons for pruritus in EB patients are probably dry skin, healing or crusted wounds, inflammations and persisting skin damage caused by necessary continuous wound healing.

Some concerned say that itching occurs when healing starts. We think that in this case itching is caused by two factors: First in this case there is always a situation similar to a light inflammation (not caused by bacteria). Inflammation accompanies the healing process. In addition there is often dryness in the wounds causing a slight contraction of the lip of the wound. Both inflammation and dryness could be reasons for itching during the healing process.

In any case you should not hesitate to think about completely different reasons for a long itching period. Anaemia caused by iron deficiency can also be a reason for itching in EB, and we also have to consider other possibilities, because EB does not exclude the occurrence of other diseases.

What can be done?

General precautions

- drink enough! (against desiccation)
- don't over heat rooms, moisten the air
- don't use desiccating remedies like
 - o gels
 - o alcohol based ointments
 - o powder
- thrifty use of soaps
- don't bathe too long and not too hot, take a cold shower after it (if possible!) as the pores close and keep the moisture in the skin
- moist, cooling poultice with NaCl or black tea (black tea should be left for about 15 minutes and chilled - it contains tanning agents that soothe itching)
- airy clothes made of non-irritable materials such as cotton and silk (e.g. Dermasilk[®])
- bed-linen made of cooling materials (e.g. Microair[®])

Local therapy

Depending on the supposed reason we recommend different approaches, these can be skin care treatments, medications or behaviouristic measures.

- Skin care products e.g.:

- Excipial U Lipolotio[®]
 - Excipial Crème[®]
 - Excipial Fettcreme[®]
 - Eucerin Lotio 10% Urea[®]
 - Eucerin Spezialcreme[®]
 - Excipial Hydrocreme[®]
 - Excipial Lipocreme[®]
 - Excipial Liposalbe[®]
 - Excipial U - Hydrolotio[®]
 - ECR Creme[®] (Fa Golden Dolphin)
 - NutrientCreme[®] (Fa dline)
 - LipoLotion[®] (Fa dline)
 - HydroLotion[®] (Fa dline)
 - BasicLotion[®] (Fa dline)
 - ZincCreme[®] (Fa dline)
 - Harnstoff (Urea) Eucerin 10% (Apotheke)
 - Different skin care oils of our hospital
- Bathing additives e.g.
 - Balneum Hermal F[®]
 - Balneum Hermal plus[®]
 - Balmandol Ölbad[®]
 - Eucerin Ölbad[®]
 - Nutrient Plus[®] (Fa. dline)

Drug Therapy

- Short-term steroid therapy is often very effective
- Antihistaminic pills, juices, drops
 - this type of medicine also stops inflammation, it helps against itching in two ways: by stopping the activity of Histamine as well as the inflammation process
 - some of them tire you out, so they are better used in the evening. But in the meantime you can find some medication that does not make you tired or only to a small extent
 - Loratadin (Clarityn[®], Loratyn[®])
 - Cetirizin (Zyrtec[®], also obtainable as a Generic)
 - Desloratadin (Aerius[®])
 - Diphenhydramin (Dibondrin[®], in the evening)
- Hydroxyzin (Atarax[®])
 - also makes you tired, use it in the evening
 - strictly speaking a tranquilliser (but does not make you addicted), can also be given to children

Behaviouristic Measures

to interrupt the circle of itching – scratching – more itching – more scratching ...

- don't scratch but press or rub the skin
- don't scratch immediately but wait (perhaps the itching will disappear)
- scratch an object instead of the skin ("scratching block")
- cut your fingernails short
- eventually wear cotton gloves at night
- learn methods to relax (autogenous training, progressive muscle relaxation by Jacobsen, Yoga...)

In addition to that there are many other substances, especially ointments, lotions and bathing additives. Some of these mixtures (mostly recommended by relatives or mixed by pharmacists) are a sensible complement to the lists mentioned above. Of course we have to add that we have **no** commercial interest in any of the listed products, and we know that there are many more useful products, but these are the products we are mainly using in Austria at present.

Our request to all of you: If you are using other substances or products with a good result, please inform us by mail, phone or letter – we are happy to receive all of your suggestions to supplement this summary so that it can be a useful guide for people living with EB and itching.

A last suggestion: Itching often grows worse in the evening. Children as well as adults are often really in high spirits (German: "aufgekratzt" nominally "scratched open") because of the many events during their everyday life. This is true for EB patients as well but it can have severe effects. Perhaps it could be helpful to develop rituals for going to bed in a quiet and unexciting way. We would like to encourage adults in finding their own rituals, too!

And last but not least I would also like to encourage you to come forward if your skin itches. It might not be easy to find a satisfying result for this problem, you might have to face setbacks again and again but I am convinced that in many cases with patience and confidence an improvement will be possible!

Yours,
Anja Diem