CONDITION

Ichthyosis vulgaris

Ichthyosis vulgaris is an inherited condition that causes persistently dry, thickened, and scaly skin.

WHAT IT IS
Inherited condition causing dry, scaly skin

BODY SYSTEM
Skin

MAIN SYMPTOMS
Dryness, fine scales, itching, rough bumps

WHAT CAUSES IT
Usually inherited FLG gene changes affecting the skin barrier

HOW IT IS DIAGNOSED
Skin examination; sometimes genetic testing or skin biopsy

MAIN TREATMENT
Moisturising and scale-softening skin treatments

CAN IT BE CURED?
No - inherited skin barrier changes persist

IS IT AN EMERGENCY?
No - infection or overheating may need urgent care

LONG-TERM OUTLOOK
Lifelong, often improving with age and humid weather

Overview

Ichthyosis vulgaris is a long-term skin condition that causes dry, thickened, and scaly skin. "Ichthyosis" comes from a Greek word for fish, referring to the scale-like appearance. "Vulgaris" means common.

The condition affects the skin barrier, which normally keeps moisture in and protects against irritants. In ichthyosis vulgaris, dead skin cells do not separate from the skin surface as easily as they should. They build up into visible scales while the skin loses moisture.

Symptoms usually begin during infancy or early childhood rather than at birth. They may become more noticeable in cold, dry weather and improve during warm, humid months. Severity differs widely, even among members of the same family.

Ichthyosis vulgaris does not usually affect internal organs or shorten life. However, persistent dryness, itching, cracking, and the appearance of the skin can affect comfort, sleep, confidence, and daily routines. Regular skin care is often needed throughout life.

Symptoms

The main symptom is very dry skin covered by small, fine scales. The scales may look white, grey, or brown, depending on your skin tone and the thickness of the scale.

Common features include:

The folds behind the knees, inside the elbows, and in the groin and armpits are often less affected. This pattern can help distinguish ichthyosis vulgaris from some other scaly skin conditions.

Symptoms commonly worsen during winter, in air-conditioned or heated rooms, and after using harsh soaps. Frequent swimming in chlorinated water may also increase dryness.

Some people have eczema as well. Eczema causes inflamed, itchy patches and may appear red, purple, brown, or grey depending on skin tone. Asthma and hay fever are also more common among people with changes in the skin-barrier protein linked to ichthyosis vulgaris.

- Fine scales on the lower legs, arms, abdomen, or back
- More noticeable scaling on the shins
- Rough, dry, or itchy skin
- Deep or unusually numerous lines on the palms
- Small rough bumps around hair follicles, called keratosis pilaris
- Cracks that can become sore or bleed

Causes and risk factors

Ichthyosis vulgaris is usually caused by changes in a gene called FLG . This gene provides instructions for making filaggrin, a protein that helps form a strong, moisture-retaining skin barrier.

The condition can be inherited from one or both parents. A person who inherits an altered FLG gene from both parents may have more noticeable symptoms than someone who inherits one altered copy. However, genes do not predict the exact severity, and relatives with the same change can be affected differently.

Having an FLG change can also increase susceptibility to eczema and some allergic conditions. It does not mean that these conditions will definitely develop.

Skin that first becomes scaly during adulthood is less typical of inherited ichthyosis vulgaris. A similar appearance, called acquired ichthyosis, can occasionally be associated with a medicine or another health condition. New, widespread scaling in adulthood should therefore be assessed rather than assumed to be inherited ichthyosis.

Cold temperatures, low humidity, harsh cleansers, and long hot showers do not cause the inherited condition. They can make its symptoms more obvious.

Diagnosis

A healthcare professional can usually diagnose ichthyosis vulgaris by examining your skin and asking when the symptoms began. The pattern of scaling, whether skin folds are spared, and a family history of similar skin can support the diagnosis.

They may also ask about eczema, allergies, medicines, and any recent changes in your general health. This is especially important if scaling started suddenly or for the first time in adulthood.

Testing is not always needed. If the diagnosis is uncertain, a dermatologist may consider:

Genetic testing can support the diagnosis, but it may not explain exactly how severe the condition will be. A skin biopsy can show patterns consistent with ichthyosis, although these findings are not always unique to ichthyosis vulgaris.

- Genetic testing for changes involving FLG
- A skin biopsy, in which a small skin sample is examined
- Blood or other tests when acquired ichthyosis is possible

Treatment and management

There is no treatment that removes the inherited tendency, but regular skin care can reduce dryness, scaling, itching, and cracking. The goal is to add moisture, support the skin barrier, and loosen built-up skin cells without causing irritation.

A typical routine may include a short bath or shower in lukewarm water, followed by a thick moisturiser while the skin is still slightly damp. Creams and ointments usually hold in more moisture than thin lotions. Fragrance-free products are less likely to irritate sensitive or cracked skin.

Scale-softening products are called keratolytics . They may contain urea, lactic acid, ammonium lactate, other alpha-hydroxy acids, or salicylic acid. These ingredients help loosen dead skin cells. They can sting inflamed or split skin, so the choice and strength need to suit your age, skin area, and symptom severity. Salicylic acid requires particular care when used over large areas or on children because too much can be absorbed through the skin.

Gentle rubbing with a soft cloth after soaking may lift loose scale. Forceful scrubbing, picking, pumice stones, and abrasive exfoliation can cause small injuries and worsen irritation.

If eczema is also present, it may need separate treatment. Anti-inflammatory creams used for eczema do not directly correct the scaling of ichthyosis vulgaris.

Severe symptoms that do not respond to topical care may be assessed by a dermatologist. Oral retinoids, medicines related to vitamin A, are occasionally used for severe ichthyosis. They can cause important side effects and birth defects, so they require specialist prescribing, pregnancy precautions where relevant, and ongoing monitoring.

Complications

Most complications result from a weakened, very dry skin barrier rather than damage to internal organs.

Deep cracks can be painful and may allow bacteria to enter. Signs of infection can include increasing warmth, swelling, tenderness, pus, or redness that is spreading. Redness may be less obvious on brown or black skin, so pain, heat, swelling, or a change in skin colour may be more noticeable.

Some people sweat less efficiently through thickened skin. This can make it harder to cool down during hot weather, exercise, or fever. Heat intolerance is not severe for everyone, but it should not be ignored if you become dizzy, unusually weak, confused, or unable to cool down.

Persistent itching can disturb sleep. Visible scaling may also affect clothing choices, social activities, work, school, or self-confidence. These effects are valid reasons to seek additional support or a review of treatment.

Prevention

Inherited ichthyosis vulgaris cannot be prevented through diet, hygiene, supplements, or skin-care choices. It is caused by genetic changes affecting the skin barrier.

You may be able to prevent some cracking and symptom flares by moisturising regularly,

avoiding harsh soaps, and reducing exposure to very hot water or dry air. A humidifier may help in a dry home, provided it is cleaned according to its instructions.

If you are planning a pregnancy and want to understand how the condition may be inherited, genetic counselling can explain possible inheritance patterns. It cannot predict the exact severity in a child.

Living with it and what to expect

Ichthyosis vulgaris usually becomes noticeable in the first years of life. It often improves after puberty or with increasing age, but the underlying tendency toward dry, scaly skin remains. Symptoms may continue to come and go with seasons, climate, skin-care habits, and other skin conditions.

Many people develop a routine that keeps symptoms manageable. More moisturising may be needed during winter, while treatment can sometimes be reduced in warm, humid weather. A product that works well on thick scales may be too irritating for the face, skin folds, or cracked areas.

Typical ichthyosis vulgaris does not usually limit physical activity or affect life expectancy. If heat makes exercise uncomfortable, choosing cooler times of day, taking breaks, and paying attention to early signs of overheating may help.

Children may gradually take on parts of their skin-care routine as they get older. Simple explanations for teachers, coaches, or caregivers can help them understand that the condition is not infectious and that moisturiser or cooling breaks may be needed.

If treatment becomes burdensome or stops working, a routine review can help simplify the plan. A dermatologist may also check whether eczema, contact irritation, infection, or a different skin condition is contributing to worsening symptoms.

When to get medical help

Arrange a routine appointment if:

Seek prompt medical advice for increasing pain, warmth, swelling, pus, fever, or rapidly spreading skin discolouration, as these may indicate infection.

Move to a cool place and seek urgent help if you cannot cool down or develop marked dizziness, vomiting, unusual weakness, or a severe headache in hot conditions.

Confusion, fainting, seizures, severe breathing difficulty, or loss of consciousness are

emergency symptoms. Call emergency services.

- You or your child has persistent scaling without a diagnosis
- Symptoms are painful, itchy, affecting sleep, or difficult to manage
- Cracks repeatedly bleed or interfere with walking or hand use
- Scaling begins suddenly in adulthood
- A treatment causes persistent burning, redness, or peeling
- You need help managing associated eczema or allergies

Common questions

Is ichthyosis vulgaris contagious?

No. You cannot catch it through touch, shared towels, swimming pools, or close contact. The usual form is inherited through genes.

Will ichthyosis vulgaris go away?

The underlying skin-barrier change is lifelong. Symptoms often become milder with age and may almost disappear during warm, humid weather, but they can return during dry or cold periods.

Is ichthyosis vulgaris the same as eczema?

No. They are different conditions, although both involve a weakened skin barrier and can occur together. Ichthyosis mainly causes dry scaling. Eczema causes inflammation and itching, often in patches.

Can I scrub the scales off?

Gentle removal of loose scale after soaking may help. Hard scrubbing or picking can damage the skin, increase irritation, and create cracks. Scale-softening moisturisers are usually safer for regular management.

Can my child inherit ichthyosis vulgaris from me?

It is possible because the usual form is inherited. The likelihood and severity are influenced by which FLG gene changes are present. A genetic counsellor can explain inheritance based on your family circumstances.

Why is my skin worse in winter?

Cold outdoor air and heated indoor air both have low humidity. This increases water loss from an already weakened skin barrier, making dryness, scaling, itching, and cracking more

noticeable.

Sources

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