

# Dry, flaky legs? Hyperkeratosis, what it is and how to treat it

Hyperkeratosis is a skin condition that results in a build up of dry, flaky skin on the lower limb that can cause itching, odour and an increased risk of infection. Here we explain what causes hyperkeratosis and how to treat it.



**H**yperkeratosis is an abnormal thickening of the outer layer of the skin on the lower limbs. It is caused by an over-production of keratin-producing cells in the skin. Keratin is a structural protein that helps to make the skin waterproof.

Hyperkeratosis is associated with long-term swelling of the limbs and a build-up of fluid in the tissues that results in

high pressure in the veins of the leg (venous hypertension) and chronic inflammation of the skin<sup>1,2</sup>.

The build up of keratin results in the appearance of dry, crusty flakes of skin on the lower leg (also known as plaques). The skin may be red and dry, while the scales may be brown or grey in colour. Hyperkeratosis can be mild and affect a small area of skin, or can



be widespread, in severe cases, affecting the whole lower limb.

Hyperkeratosis may be accompanied by an unpleasant odour that is caused by

microorganisms collecting underneath skin flakes. In addition, the dry, flaky skin can itch. Unfortunately scratching can lead to skin damage and increase the risk of a bacterial infection called cellulitis.

Cellulitis starts with a red, painful, hot, swollen and tender area of skin that will gradually spread without treatment. Blistering may occur. A general feeling of being unwell and/or tiredness may come before or at the same time as the skin symptoms. If you suspect you might have cellulitis, you should contact a healthcare professional immediately as it requires treatment with antibiotics.

People with hyperkeratosis can understandably feel embarrassed by the physical appearance of the limb and any associated odour. This in combination with the discomfort and itching, can lead to anxiety, depression and social isolation. Luckily, it can be treated.

### How can I treat hyperkeratosis?

Compression therapy and good skin care are key components to preventing and managing hyperkeratosis.

Hyperkeratosis is an abnormal thickening of the outer layer of the skin that is caused by an over-production of keratin-producing cells in the skin.

Compression therapy helps to correct the underlying problem of increased pressure in the veins of the lower limbs. This helps to reduce swelling and chronic inflammation, so helping to improve skin and limb health.

It is also important to keep skin clean, dry and well moisturised with daily, or twice daily application of an emollient (see opposite for more details on skin care). Mild hyperkeratosis can be prevented or managed effectively this way. However, if the hyperkeratosis is moderate to severe, exfoliation will be required and should be carried out by a healthcare professional so the skin is not damaged. This is sometimes referred to as mechanical debridement and is a way of safely removing flakes or plaques. Removing the hyperkeratosis will allow emollients to penetrate the skin, to improve its condition.

### How can I treat it?

If you think you may have hyperkeratosis, speak to your healthcare professional. They will be able to make a diagnosis following an examination of your skin and advise on what to do next to improve your skin health. This advice should be tailored to you and should consider your individual health and wellbeing, your ability to care for your limbs yourself, and your personal preferences. ➤

# Daily skin care for your legs

## Wash your skin each day

Wash your skin daily avoiding perfumed soap products which may irritate your skin or cause it to dry out. Soap can strip the natural, protective barrier of the skin and increases the risk of it becoming more dry and itchy.



advise you on how to use it. Generally, they should be used gently, using light pressure and a circular motion on the skin. It may take several attempts to remove all the hyperkeratosis, especially if it is severe.

Always pat the skin dry and avoid vigorous rubbing as this can also damage the skin. Pay particular attention to between the toes and any folds in the skin. Patting the skin dry after washing will help to sooth any itching your may have.

## Remove hyperkeratosis

Hyperkeratosis can become very itchy and so it should be gently removed during washing or bathing. Sometimes you may need a special pad or wipe to help you remove the dry, dead skin. Your healthcare professional will prescribe one that is suitable for you and

## Moisturise

Once your skin is clean, dry, and free from flakes, apply a simple, chemical free emollient or moisturiser to help keep your skin supple, smooth and elastic. Apply the cream or ointment in a downward motion as massaging upwards forces the cream or ointment into the hair follicles which can cause them to become inflamed (known as folliculitis).

Don't apply compression garments straight after moisturising. Emollients can damage the fabric of your garment and can make application difficult. ▶▶