

# WHAT ARE THE AIMS OF THIS LEAFLET?

This leaflet has been written to help you understand more about lichen planus. It tells you what it is, what can be done about it, and where you can find out more about it.

#### WHAT IS LICHEN PLANUS?

Lichen planus is an uncommon inflammatory condition that can affect various parts of the body, including the skin, mucous membranes (mouth, gums, vulva, vagina, penis), hair and nails. It can affect anyone and presents differently across people.

It typically is seen after the ages of 20, with most people affected between the ages of 40 and 70. **Oral lichen planus** is slightly more common. Lichen planus is rare in children.

# WHAT CAUSES LICHEN PLANUS?

A precise cause of lichen planus is not well understood but it is thought to involve an abnormal immune response. The body's immune system starts to attack cells in the skin and mucous membranes. We also know that several factors may trigger it, for example:

- Viruses such as hepatitis C, hepatitis B, human herpes virus and varicella zoster virus.
- Substances in contact with the skin such as mercury, copper, and gold, such as in tooth fillings (tooth amalgam).
- Medicines such as some tablets for high blood pressure, medicines to treat malaria, infections, and depression.
- Stress and anxiety.

## IS LICHEN PLANUS HEREDITARY?

No, it is not hereditary. However, the tendency to get lichen planus can sometimes run in families, especially twins, though this is not an absolute.

# WHAT DOES LICHEN PLANUS OF THE SKIN FEEL AND LOOK LIKE?

Lichen planus on the skin is usually, but not always, itchy. Other symptoms depend on which parts of the body it affects. These symptoms may be pain (for example, if the mouth, vulva or vagina is affected), affecting appearance (hair loss in scalp lichen planus or dark coloured patches on the face if the face is affected), or function (for example, if the nails are affected).

The typical skin rash of lichen planus is made up of clusters of shiny, slightly raised pink or purple-red spots, usually measuring 1-3 mm in diameter. A close look may show fine white streaks on their surface. The rash usually affects the insides of the wrists, around the ankles and on the lower back, but can spread more widely. Lichen planus can also appear in a line where the skin has been scratched or injured (this is called Koebner's response). The rash can heal to leave marks which are darker than the original skin colour.

In skin of colour, lichen planus of the skin may not show the typical pink or purple colour; the rash may be darker than skin colour, may have a purplish hue, but will show the characteristic fine streaks. The streaks may be white, or lighter than the background skin colour.

## WHAT ARE THE OTHER TYPES OF LICHEN PLANUS AND WHAT DO THEY LOOK LIKE?

Other types of lichen planus include:

- Thickened ('hypertrophic') lichen planus, which tends to affect the shins and can look like warts.
- Ring-shaped ('**annular**') lichen planus, which tends to affect the armpits, penis, scrotum, and groin.

- Lichen planus of the scalp (lichen planopilaris) can cause patches of hair loss in areas. Hair loss is usually permanent.
- Lichen planus can sometimes develop on sun-exposed areas, such as on the face, ('actinic' lichen planus).
- Nails can be affected, with thinning of the nail plate, or the nails becoming rough and grooved. Affected nails can sometimes become permanently scarred.
- Lichen planus often affects the inside of the cheeks and the gums, and this can be seen in about 50% of people who have it on the skin (see Patient Information Leaflet on oral lichen planus).
- Erosive lichen planus is a painful type of lichen planus affecting the genital area. Rarely, when affecting the vulva and vagina, it can be associated with a severe form of lichen planus that also affects the gums and oesophagus (vulvo-vaginal-gingival syndrome).
- In some patients, oval grey-brown flat marks appear on the face and neck or trunk and limbs without a preceding rash. This is called lichen planus pigmentosus. This type of lichen planus is more common in people with darker skin tone.
- Lichen planus can sometimes blister ('**bullous'** lichen planus). This is rare and usually affects the lower legs.

There is a low risk of skin cancer (squamous cell carcinoma) developing in areas of persisting, severe lichen planus, such as in hypertrophic lichen planus or affecting mucous surfaces (erosive lichen planus) such as in the mouth and gums, vulva and vagina, and penis.

## HOW IS LICHEN PLANUS DIAGNOSED?

The diagnosis of lichen planus is usually made by a doctor examining the rash. Sometimes, it may be difficult to tell between lichen planus and other skin conditions such as eczema, warts, or a rashes caused by medications. If the diagnosis is not clear, a skin biopsy, performed under local anaesthetic, made be needed to confirm the diagnosis. Your doctor will advise you if this is required.

# CAN LICHEN PLANUS BE CURED?

In most patients, lichen planus will heal by itself, and not return. Some people, however, have recurrent episodes that may be spaced months or years apart. Unfortunately, some types of lichen planus, such as those affecting the scalp, nails, mouth or genitalia, can last for many years. Even after lichen planus has cleared, darker stains than the original skin colour may persist on the skin for a long time, particularly those who have skin of colour.

Currently, there is no cure lichen planus. The aim of treatments is to control the condition and reduce symptoms, prevent spread, and minimise damage.

## HOW CAN LICHEN PLANUS BE TREATED?

Appropriate treatments for this condition depend upon the type of lichen planus present, the severity of symptoms, and if there any specific risks, such as hair loss or nail damage.

*Mild* lichen planus, without symptoms, often does not need any treatment.

Moderate lichen planus of the skin. Affected areas are usually treated with steroid creams or ointments (topical steroids). Potent and/or very potent steroids are usually needed. These should usually be applied carefully once a day, as instructed by your doctor, to affected areas. As the rash and itch clear, the red-purple spots change to grey- or light-brown flat marks. At this stage, the skin no longer requires treatment with a steroid. These marks will slowly fade with time. Non-steroid antiinflammatory (prescription-only) medications, such as tacrolimus ointment and pimecrolimus cream, can sometimes be used for lichen planus. These are especially useful for delicate areas, such as the face, armpits, and groins, as they do not carry any risk of causing skin thinning when used in the long-term.

*Severe or widespread lichen planus.* For severe or widespread lichen planus, the initial treatment is with a course of steroid tablets



(oral steroids), in combination with topical steroids. If there is little improvement in the rash, further treatments such as ultraviolet therapy (narrow band ultraviolet B therapy, or NB-UVB) or acitretin (a tablet treatment) may be considered. Further treatments include methotrexate and hydroxychloroquine for stubborn disease.

#### Lichen planus of the mouth (oral lichen planus).

Treatment options include topical steroids and mouthwashes for mild cases, while severe cases may require oral corticosteroids or other immune-affecting medications such as methotrexate, mycophenolate mofetil, or azathioprine.

#### Lichen planus of the hair (lichen planopilaris).

This carries the risk of permanent hair loss (scarring alopecia). Treatments include topical potent or ultrapotent steroids, steroid injections, and medicines such as hydroxychloroquine. If the response is poor, mycophenolate mofetil or **methotrexate** may be added.

Lichen planus of the nails. Nail disease can be slow, or rapidly progressive, and may cause permanent damage. For rapidly progressive nail disease, intramuscular steroid injections or steroid tablets may be used to slow the disease and combine with medicines such as acitretin or methotrexate used to control the condition. If only a few nails are affected, steroid injections can be given directly to the affected nails.

Lichen planus of the vulva and vagina. This can be particularly stubborn. Initial treatment is with potent and super potent topical steroids and maintaining good skin care of the area (See Patient Information Leaflet on vulval skincare). A gynaecologist may need to become involved if the vagina is affected, particularly if there are signs of scarring and damage to the vagina. If the damage cannot be controlled with topical treatments, further treatments include methotrexate, mycophenolate mofetil, and hydroxychloroquine.

*Lichen planus of the penis.* In most cases, lichen planus without symptoms does not require treatment. If symptoms are present, potent

and/or super potent topical steroids are used. In a minority of cases, where there is severe inflammation not responsive to topical treatments, or scarring of foreskin develops, circumcision may be required.

Please note, there are no specific medicines directly developed to treat lichen planus. The use of medicines described above are outside of their product license. Through use and experience, there is cumulative evidence that they are helpful and effective. These treatments do not cure the lichen planus. If they are stopped prematurely, any rash may flare and worsen. Treatments often require careful monitoring with blood tests. Like any medicine, the balance of risks of harmful effects versus benefits need careful consideration by the patient and the treating doctor.

# SELF-CARE (WHAT CAN I DO?)

Try to avoid injuring or scratching your skin. New patches of lichen planus can develop in scratched and damaged skin. Keeping the skin hydrated with a regularly applied moisturiser (emollient) can also help reduce symptoms from lichen planus, such as itch.

#### CAUTION:

This leaflet mentions 'emollients' (moisturisers). Emollients, creams, lotions and ointments contain oils. When emollient products get in contact with dressings, clothing, bed linen or hair, there is a danger that they could catch fire more easily. There is still a risk if the emollient products have dried. People using skincare or haircare products should be very careful near naked flames or lit cigarettes. Wash clothing daily and bedlinen frequently, if they are in contact with emollients. This may not remove the risk completely, even at high temperatures. Caution is still needed. More information may be obtained at https://www.gov.uk/guidance/safe-useof-emollient-skin-creams-to-treat-dryskin-conditions.



# WHERE CAN I GET MORE INFORMATION ABOUT LICHEN PLANUS?

Website links to other relevant sources: https://dermnetnz.org/topics/lichen-planus www.emedicine.com/derm/topic233.htm

www.uklp.org.uk

Please note that the British Association of Dermatologists (BAD) provides web links to additional resources to help people access a range of information about their treatment or skin condition. The views expressed in these external resources may not be shared by the BAD or its members. The BAD has no control of and does not endorse the content of external links. This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

# BRITISH ASSOCIATION OF DERMATOLOGISTS

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