CONDITION

Lichen planus

Lichen planus is an inflammatory condition that can affect the skin, mouth, genitals, scalp, and nails.

WHAT IT IS
Inflammatory condition affecting skin, mouth, genitals, hair, or nails

BODY SYSTEM
Skin, mouth, genitals, hair, and nails

MAIN SYMPTOMS
Itchy purple bumps, white mouth patches, soreness, hair loss

WHAT CAUSES IT
Immune reaction; exact trigger often unknown

HOW IT IS DIAGNOSED
Clinical examination, often confirmed by biopsy

MAIN TREATMENT
Corticosteroids and other inflammation-controlling treatments

CAN IT BE CURED?
Sometimes - skin disease may clear completely

IS IT AN EMERGENCY?
No, though inability to drink needs urgent care

LONG-TERM OUTLOOK
Skin often clears; mouth, scalp, or genital disease may persist

Overview

Lichen planus, also called lichen ruber planus, is a condition caused by inflammation in the skin or moist body linings called mucous membranes. It can affect the mouth, genitals, scalp, and nails as well as the skin.

The condition is not infectious, so you cannot catch it from someone or pass it to another person. It is not a type of cancer.

Lichen planus looks and behaves differently depending on where it develops. Skin lichen planus often causes itchy, raised bumps. Oral lichen planus may cause white lines, red patches, or painful sores inside the mouth. Scalp disease can damage hair follicles, while genital disease may cause pain or scarring.

Some forms clear over time. Others, especially those affecting the mouth, genitals, scalp, or nails, can last for years or return after treatment. Early assessment matters because persistent inflammation in these areas may cause lasting damage.

Symptoms

On the skin, lichen planus commonly appears as small, firm, flat-topped bumps. They may look purple, reddish-brown, or grey, depending on your skin tone. Fine white lines, known as Wickham striae, may be visible on the surface.

Skin changes often:

Inside the mouth, lichen planus often affects the inner cheeks, gums, or tongue. It may cause a painless, lace-like pattern of white lines. More inflamed forms can cause red, raw, or open areas that burn during eating, drinking, or toothbrushing. Spicy, acidic, or rough foods may make the discomfort worse.

Genital lichen planus can cause red or pale patches, burning, itching, pain, or open sores. Vaginal involvement may cause discharge, pain during sex, narrowing, or scarring. On the penis, it may appear as smooth, ring-shaped, or flat-topped patches.

When the scalp is affected, the condition is called lichen planopilaris. It may cause redness, scaling, itching, tenderness, and patchy hair loss. Damaged follicles may not regrow hair.

Nail lichen planus can cause thinning, ridges, splitting, or lifting of the nail. Severe inflammation may permanently damage or destroy a nail.

Not everyone has symptoms in more than one area. Mouth changes, for example, can occur without a skin rash.

- Itch, sometimes intensely
- Develop on the wrists, ankles, lower back, or legs
- Appear where the skin has been scratched or injured
- Leave flat, darker marks after the raised bumps settle

Causes and risk factors

The exact cause is often unknown. Lichen planus appears to develop when the immune system mistakenly attacks cells in the outer layer of the skin or mucous membranes.

It is not usually inherited. Having a relative with lichen planus does not mean that you will

develop it.

Some medicines can cause a similar-looking reaction called a lichenoid drug eruption. Possible triggers include several types of medicine used for blood pressure, pain, heart conditions, or other long-term health problems. The reaction may begin months after a medicine was started. Do not stop a prescribed medicine without medical advice.

Hepatitis C, a viral infection affecting the liver, is associated with lichen planus in some populations and parts of the world. This does not mean that most people with lichen planus have hepatitis C. Testing may be considered based on your medical history, risk factors, and local practice.

Occasionally, a reaction near dental fillings or other materials may resemble oral lichen planus. This is known as an oral lichenoid contact reaction.

Stress does not directly cause lichen planus, but discomfort and flare-ups may feel harder to manage during stressful periods.

Diagnosis

A doctor, dentist, or dermatologist may suspect lichen planus from its appearance and the areas affected. They will usually ask when the changes began, whether they itch or hurt, and which medicines or supplements you use.

A biopsy is often used to confirm the diagnosis, particularly for persistent mouth or genital changes. During a biopsy, a small piece of affected tissue is removed after the area is numbed. A laboratory specialist then examines it under a microscope.

A biopsy can also help distinguish lichen planus from eczema, psoriasis, autoimmune blistering conditions, infection, precancerous changes, or other causes of mouth and genital sores. Occasionally, a specialised test called direct immunofluorescence is performed on a second tissue sample.

Blood tests do not confirm lichen planus. They may be used to check for hepatitis C or for health problems that could affect treatment. Patch testing for contact allergy may be useful in selected cases, particularly when oral changes are close to dental materials.

Scalp and nail disease can be difficult to recognise early. A close examination with a magnifying device or a biopsy may be needed.

Treatment and management

Treatment depends on the location, severity, and effect on everyday life. Mild skin lichen planus may not need active treatment if it is not uncomfortable. Treatment controls inflammation and symptoms; it does not guarantee that the condition will not return.

Corticosteroids like prednisone or hydrocortisone are the main treatment. These medicines reduce immune inflammation. They may be used as creams or ointments for the skin, gels or rinses for the mouth, or preparations designed for genital areas. Strong products need careful instructions because prolonged or incorrect use can thin the skin or cause other side effects.

Other treatments may include:

Oral treatment may also include pain-relieving or protective products. Good dental care is important because plaque, sharp teeth, and poorly fitting dentures can irritate inflamed tissue. A clinician may check for fungal infection, which can sometimes develop in a sore mouth or during corticosteroid treatment.

Genital lichen planus may require coordinated care from dermatology, gynaecology, urology, or sexual health services. Treatment aims to control pain and prevent narrowing or scarring. Some people with vaginal involvement are advised to use treatments or devices that help keep tissues flexible, under specialist guidance.

Scalp and nail disease should be assessed promptly. Treatment may stop or slow further damage, but it cannot restore a hair follicle or nail structure that has already been permanently scarred.

If a medicine may be contributing, the prescriber can consider a safe alternative. Improvement after changing a trigger medicine may be slow.

- Moisturisers and anti-itch medicines for skin discomfort
- Light treatment, called phototherapy, for widespread skin disease
- Non-steroid immune-controlling ointments for some sensitive areas
- Tablets or injections that reduce inflammation in severe or persistent cases
- Medicines that alter skin-cell growth or immune activity under specialist care

Complications

Skin lichen planus may leave darker or, less commonly, lighter areas after the active bumps disappear. These colour changes can last much longer than the rash, particularly in darker skin tones.

Repeated scratching can break the skin and occasionally lead to infection. Persistent itching

may also disturb sleep and concentration.

Scalp lichen planus can cause permanent, patchy hair loss. Nail inflammation can produce lasting nail distortion or loss. Genital disease may lead to adhesions, narrowing, pain during sex, or difficulty passing urine if scarring is severe.

Long-standing oral or genital lichen planus carries a small increased risk of squamous cell carcinoma, a type of cancer arising in surface cells. The overall risk is low, but regular review is important when there are persistent raw, thickened, ulcerated, or changing areas. Tobacco and heavy alcohol use add to the risk of mouth cancer.

Pain with eating can reduce food choices and, when severe, contribute to weight loss or dehydration. Mouth or genital symptoms can also affect confidence, relationships, and sexual wellbeing.

Prevention

Lichen planus usually cannot be prevented because its underlying immune trigger is not known.

If a medicine has caused a lichenoid reaction, avoiding that medicine in the future may prevent another reaction. This decision should be recorded and discussed with the clinician who prescribes your medicines. Do not stop treatment on your own.

Protecting the skin from repeated scratching or injury may reduce the appearance of new bumps in damaged areas. This does not prevent the condition itself.

For oral lichen planus, avoiding tobacco and limiting alcohol can reduce irritation and lower other oral health risks. Regular dental care, gentle toothbrushing, and correcting rough dental edges may make symptoms easier to control, but they do not cure the immune inflammation.

Living with it and what to expect

Skin lichen planus often settles over months to a few years. New bumps may appear while older ones flatten. Dark marks can remain after the active inflammation has ended and may fade slowly.

Mouth lichen planus is more likely to persist or follow a pattern of flares and quieter periods. White, painless areas may need monitoring rather than continuous treatment. Painful red or eroded areas usually require more active care.

Genital lichen planus can also be long-lasting. Regular follow-up may be needed to check

symptom control, tissue flexibility, and any areas that have changed. Scalp and nail forms may continue to progress unless inflammation is controlled, which is why early review is important.

Follow-up is tailored to the affected area. Persistent oral or genital disease may be reviewed by a dentist, oral medicine specialist, dermatologist, gynaecologist, or urologist. Keep appointments even when symptoms are mild, because some important changes are easier to see than to feel.

Many people continue their usual work, exercise, and relationships. Practical adjustments may include using bland foods during mouth flares, fragrance-free skin products, loose clothing, or lubricants for sexual activity. Support is available if visible skin changes, hair loss, pain, or sexual symptoms affect your emotional wellbeing.

When to get medical help

Arrange a routine appointment if you develop a persistent itchy rash, white or sore areas in your mouth, genital discomfort, unexplained nail damage, or patchy hair loss. Early assessment is especially useful for scalp, nail, or genital symptoms because some damage can become permanent.

Seek prompt medical advice if:

Emergency care is rarely needed for lichen planus itself. Get urgent emergency help if you cannot swallow fluids and are becoming dehydrated, or if you develop difficulty breathing. Widespread blistering, skin peeling, or sores affecting several body linings after starting a medicine also needs immediate assessment because this is not typical lichen planus and may indicate a more serious reaction.

- Mouth pain stops you eating or drinking normally
- A mouth or genital ulcer lasts longer than two weeks
- An affected area becomes thicker, develops a lump, bleeds, or changes appearance
- Scalp pain or redness is accompanied by increasing hair loss
- Genital scarring affects urination, menstruation, or sexual activity
- You develop spreading redness, warmth, pus, or fever

Common questions

Is lichen planus contagious?

No. It cannot be spread through touch, kissing, sex, shared food, or shared household items. It is an immune-related inflammatory condition, not an infection.

Does lichen planus ever go away completely?

Skin lichen planus can clear completely, although darker marks may remain for some time. Mouth, genital, scalp, and nail forms are more likely to persist or return. Treatment can often control inflammation even when the condition does not fully disappear.

Is lichen planus cancer?

No. Lichen planus is not cancer. Long-standing oral or genital inflammation carries a small increased risk of developing squamous cell carcinoma, so persistent or changing areas should be monitored.

What foods should I avoid with oral lichen planus?

There is no single required diet. During a painful flare, spicy, acidic, salty, very hot, or rough foods may sting. Choosing softer, milder foods can help. Avoiding a food is only necessary if it clearly worsens your symptoms or you have another medical reason to restrict it.

Can stress make lichen planus worse?

Stress is not considered the underlying cause. Some people notice more symptoms during stressful periods, and pain or itching may be harder to manage when sleep and wellbeing are affected.

Can lichen planus cause permanent hair loss?

Lichen planopilaris can permanently damage scalp follicles and cause scarring hair loss. Hair already lost from destroyed follicles usually does not regrow. Early treatment may help protect follicles that have not yet been permanently damaged.

Sources

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