### PATIENT INFORMATION LEAFLET

# LICHEN SIMPLEX



#### WHAT ARE THE AIMS OF THIS LEAFLET?

This leaflet has been written to help you understand more about lichen simplex, what it is, what causes it and the treatment options.

#### WHAT IS LICHEN SIMPLEX?

'Lichen' is a Latin word for a plant-like moss that grows on trees and rocks. Lichen simplex describes a response to the skin being repeatedly scratched or rubbed over a long period of time (also called lichen simplex *chronicus*). A single or multiple plaque (thickened area of skin) of rough skin forms, with more markings and sometimes little bumps around the hair follicles.

Lichen simplex can affect any age group but is most common in adults. It is unusual in children.

### WHAT CAUSES LICHEN SIMPLEX?

Different skin conditions, itchy infections and persistent scratching can lead to the development of lichen simplex. Itchy skin conditions include eczema, irritant, allergic dermatitis, insect bites, fungal skin infections, varicose veins and psoriasis. The itch-scratch cycle' caused by such conditions can lead to lichen simplex in the affected area and is more common in people who feel anxious or stressed. Damage to the nerves, e.g. due to back injury, herpes zoster infection (shingles) or stroke can lead to lichen simplex. Sometimes, no cause can be identified.

# IS LICHEN SIMPLEX HEREDITARY?

Lichen simplex itself does not run in families, but some of the skin conditions

leading to lichen simplex do, such as eczema or psoriasis.

# WHAT DOES LICHEN SIMPLEX LOOK LIKE AND FEEL LIKE?

Lichen simplex creates increased surface skin markings called lichenification and can appear as a bumpy skin rash. The skin may feel dry, thickened and rough to the touch. The affected skin often looks scaly and red. Over time the skin can become darker (hyperpigmented) than the surrounding skin, especially in darker skin types.

Areas more commonly affected by lichen simplex are those within easy reach of scratching, for example the nape of the neck (lichen 'nuchae', Latin for neck), the front of the legs, outer arms, scalp, inner wrists, forearms, elbows and genitals.

Lichen simplex can be sore, but is more often very itchy. This intense itch usually comes in bursts and may be worse at times of rest and at night. The itch then prompts scratching or rubbing, which in turn aggravates the skin (called itch-scratch cycle) and may lead to superficial skin infections (such as impetigo).

#### **HOW IS LICHEN SIMPLEX DIAGNOSED?**

Lichen simplex is diagnosed by taking a history of the symptoms and examining the skin. Skin scrapings may be taken to exclude a fungal infection (such as ringworm).

If a contact allergy is suspected, a patch-test may be performed to see if there is an allergic reaction to anything coming into contact with the skin. If the diagnosis is not clear, a small skin sample (punch biopsy) may need to be taken under local anaesthetic for examination under a microscope.

#### IS LICHEN SIMPLEX SERIOUS?

Although lichen simplex is not infectious or serious, the itching can affect sleep and quality of life. Depending on the affected area, a darkened thicker patch of skin may be found unsightly or embarrassing.

#### **CAN LICHEN SIMPLEX BE CURED?**

Lichen simplex will settle with the appropriate treatment but may come back when this is stopped unless an underlying cause can be found and treated.

# HOW CAN LICHEN SIMPLEX BE TREATED?

The itch-scratch cycle needs to be broken. This is achieved by reducing skin inflammation, treating any infection and giving specific treatment for the itch sensation. It is important to understand that combinations of treatments may need to be given for several weeks or months in order to produce a resolution.

# Treatment of skin inflammation:

- Avoid soap, shower gel or bubble baths.
   A soap substitute (any bland cream, bath/shower moisturiser or ointment) should be applied prior to a bath or shower and then washed off to clean the skin. Frequent re-application of moisturisers is helpful.
- Cover the affected skin with a dressing, medicated tape, plaster or bandage (occlusion). This may help relieve the itching and reduce the damage caused by scratching. Repeated courses of strong (e.g. betamethasone) or superstrong (e.g. clobetasol propionate) steroid ointment or cream, applied once a day, are often required. Sometimes, steroid injections (e.g. triamcinolone) given into the area of skin of lichen simplex can reduce both the itch and thickness.

- Tacrolimus and pimecrolimus (topical calcineurin inhibitors) are licensed as creams / ointments to treat eczema and may reduce the skin inflammation and itch.
- Coal tar creams or ointments have antiinflammatory properties that may be helpful as a maintenance treatment. Medicated bandages may be helpful as they cover the whole area.

# Treatment of infection:

If the skin is broken or infected, an antibiotic or antiseptic cream/ointment can be used alone or together with a steroid cream or ointment. Antibiotic creams or ointments should only be applied short-term to avoid the development of antibiotic resistance. Antiseptic creams or lotions may also be used under the supervision of a healthcare professional, in the form of a wash/bath soap substitute to prevent and treat infection of the skin.

# *Treatment of itch:*

- Cooling creams containing menthol can be applied whenever itching is felt.
   These are available in concentrations ranging from 0.5% to 5% but may sting when applied if the skin is broken.
   These creams are best kept in the fridge to provide a cooling effect when applied.
- Doxepin (antihistamine) cream can be applied 3 to 4 times a day but may cause sleepiness if used too often. As a guide, one 30g tube should last at least 3 days.
- Capsaicin cream is made from chili peppers and may be applied 3 to 4 times a day for localised pain but may also help the itch. It can initially result in a burning sensation. A numbing ointment such as lidocaine 5% applied 10-15 minutes beforehand can prevent the burning sensation.

- Trans-cutaneous electrical nerve stimulation (TENS machine) has been described as helpful in improving the localised itch. This is a safe, easy to use, drug-free method of managing pain.
- Antihistamine tablets can be relatively non-sedating (for example) cetirizine, loratadine) or sedating, such as chlorpheniramine, hydroxyzine, or lowdose doxepin (anti-depressant in higher doses). Antidepressants such as amitriptyline and selective serotonin reuptake inhibitors (SSRIs), as well as gabapentin and pregabalin are used as second-line treatments.

These medications can be useful for up to a few weeks to break the itch-scratch cycle and aid sleep if taken just before bedtime. Care must be taken when used during the day, as they may cause drowsiness and interfere with the ability to drive or operate machinery.

Psychological therapy can be helpful for changing scratching habits and behaviours. These include habit reversal therapy and techniques to reduce tension and stress.

Some people affected by chronic widespread lichen simplex also benefit from ultraviolet light treatment, such as phototherapy which is usually given in a specialist hospital department or immunosuppressive tablets such as ciclosporin or methotrexate.

#### SELF-CARE (WHAT CAN I DO?)

Avoid anything which may irritate the area. This can be contact with clothing made from wool or synthetic fibre – cotton and silk are best. Nails should be kept short to avoid accidental damage of the skin. Make a conscious effort not to scratch, although this can be difficult once a scratch-itch cycle has started. Whenever the skin feels itchy, apply a moisturiser instead of scratching.

# WHERE CAN I GET MORE INFORMATION ABOUT LICHEN SIMPLEX?

A list of skin-related charities and support groups can be found at:

https://www.skinhealthinfo.org.uk/support-resources/patient-support-groups/

Web links to detailed leaflets:

http://www.dermnetnz.org/dermatitis/lichen-simplex.html

http://patient.info/doctor/lichen-simplexchronicus

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

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