NECROBIOSIS LIPOIDICA

What are the aims of this leaflet?

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

What is necrobiosis lipoidica?

Necrobiosis lipoidica is an uncommon inflammatory condition in which shiny, red-brown or yellowish patches develop in the skin, usually in young adults and in early middle age. The condition is most commonly seen in conjunction with diabetes - both the insulin-dependent and non-insulin-dependent types.

What causes necrobiosis lipoidica?

This is not fully understood. Necrobiosis lipoidica follows damage to the fibres that give the skin its strength (collagen fibres). Some think that this is due to changes in the small blood vessels of the skin.

Only one in three hundred diabetics have necrobiosis lipoidica, but most patients with necrobiosis lipoidica have, or will develop, diabetes. Necrobiosis lipoidica does not appear to be related to diabetic control.

Necrobiosis lipoidica affects all races. It can occur at any age, and it is three times more common in women than in men.

Necrobiosis lipoidica is not contagious or cancerous, but there is a small risk of skin cancer (squamous cell carcinoma) developing in longstanding lesions.

Is necrobiosis lipoidica hereditary?

No.

What are the symptoms of necrobiosis lipoidica?

Usually there are none apart from the rather unsightly appearance of the discoloured areas. However, the skin in areas of necrobiosis lipoidica is often very thin, and painful ulcers are not uncommon, especially after minor knocks. When ulcers develop, they can take a long time to heal.

What does necrobiosis lipoidica look like?

Patches of necrobiosis lipoidica usually start as one or more small, red, slightly raised areas on one or both shins. Much less often, similar areas may develop on other parts of the legs, and even on the hands, arms, trunk or face. These lesions grow slowly and may join up to form larger, flatter, irregularly-shaped areas, usually with a well-defined, red border and a shiny, yellowish centre, with visible blood vessels. These patches tend to be persistent. As the skin is thin in these areas, it is prone to breakdown (split) forming ulcers (whereby a layer of dead tissue becomes separated from the surrounding living tissue) with minor injury to the skin. The ulcerated areas can be sloughy (contain dead skin tissue) and infected.

How can it be diagnosed?

Often, the appearances are sufficient to make the diagnosis. If there is any doubt, your doctor may suggest that a small sample of skin (a biopsy) is removed, using a local anaesthetic, from one of the areas and this is examined under a microscope in the laboratory. Tests for diabetes may be suggested by the doctor for those who have necrobiosis lipoidica, but who are not known to be diabetic.

How can necrobiosis lipoidica be treated?

Treatments work best in the early stages of necrobiosis lipoidica, before scarring has developed, but the results are unpredictable and sometimes disappointing. It is reasonable not to treat necrobiosis lipoidica if there are no symptoms or ulceration. Rarely, the condition may heal on its own (up to 17%). Even when necrobiosis lipoidica heals, it is likely to leave permanent pigmentary (skin colouring) changes and thinning of the skin.

The following treatments have helped some patients:

- The most common treatments are strong steroid creams or ointments, or calcineurin inhibitors (tacrolimus 0.03% or 0.1% ointment). These

creams or ointments are sometimes covered by a plastic film dressing, and may help areas that are spreading.

- Injections of steroid into the inflamed parts of necrobiosis lipoidica can be helpful, but there is a risk of thinning the skin (see Patient Information Leaflet on Intralesional Steroid Therapy).
- A number of oral treatments have been tried for necrobiosis lipoidica, with mixed results. They include pentoxyfylline, nicotinamide, fumaric acid esters, thalidomide, antimalarials, aspirin and a variety of tablets or injections that suppress the immune system.
- PUVA treatment (a combination of long-wave ultraviolet light and a light-sensitizing tablet) may be beneficial for some individuals.
- Photodynamic therapy (a combination of red light and light-sensitizing cream) has been to shown to be helpful only in some cases.
- Laser treatments (pulsed dye laser) may help to reduce redness of the skin, but the benefits are not convincing. There is also a risk of skin ulceration following the treatment and therefore it is generally not recommended.
- Ulcerating necrobiosis lipoidica can be difficult to treat: simple pain-relief tablets and topical antiseptics, PUVA therapy, and tablets that suppress the immune system can all be helpful.
- Surgical removal of the lesions, followed by skin grafting, tends to produce an unsatisfactory cosmetic result, and the problem may recur.

What can I do?

- Protect the lesions of necrobiosis lipoidica from injury, so as to reduce the risk of ulceration. Consider protecting them with a padded dressing, elastic support stockings or shin guards.
- If the patches are unsightly, you may wish to camouflage them with cosmetics. It is worth getting professional help to find the best way to colour match and apply the cosmetics; you can ask your doctor to refer you to somewhere that focuses on supporting people with conditions affecting their appearance.
- If you have diabetes, it is best to try and keep it under good control. There is little evidence that doing so will help the necrobiosis itself, but it may limit the risk of infections that can occur if the patches become ulcerated.
- If a lump, persistent scab or ulcer develops in an area of necrobiosis lipoidica, consult your doctor without delay: an early skin cancer can very easily be treated.
- Smoking cessation is important to reduce the risk of skin ulceration and to improve wound healing.

Where can I get more information about necrobiosis lipoidica?

Web links to detailed leaflets:

http://www.diabetes.org.uk/infocentre/inform/necro.htm
http://www.diabetes.org.uk/Guide-to-diabetes/Introduction-to-diabetes/Other_associated_conditions/Skin_Necrobiosis/
http://www.dermnetnz.org/systemic/diabetes.html

Links to patient support groups:

Changing Faces
The Squire Centre
33-37 University Street
London, WC1E 6JN
Tel: 0300 012 0275 (for support and advice)
Tel: 0300 012 0276 (for the Skin Camouflage Service)
Email: skincam@changingfaces.org.uk
Web: www.changingfaces.org.uk

Skin Camouflage Network
56 Princes Meadow
Gosforth
Newcastle Upon Tyne, NE3 4RZ
Tel: 07851 073795 (helpline)
Email: enquiries@skincamouflagenetwork.org.uk
Web: www.skincamouflagenetwork.org.uk

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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