DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS (DSAP)

What are the aims of this leaflet?

This leaflet has been written to help you understand more about disseminated superficial actinic porokeratosis or DSAP. 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 disseminated superficial actinic porokeratosis?

DSAP is a skin condition causing multiple, dry, ring-like, scaly lesions up to 10 mm each, mainly on the forearms and legs. It is due to the sun causing thickening of the skin. It is sometimes confused with actinic keratosis which is also caused by sun exposure (See Patient Information Leaflet on Actinic Keratoses); however, actinic keratosis is more likely to arise on the face and hands.

DSAP is more common in women than in men and normally develops between 30-50 years of age. It is not contagious. Very rarely, inherited forms of DSAP can appear in childhood.

What causes disseminated superficial actinic porokeratosis?

Sun and/or ultraviolet light exposure causes DSAP. This condition tends to affect those of white European descent who burn easily but tan poorly in the sun. It may appear more obvious in summer and less obvious in winter. The best way to stop this skin condition from worsening is to avoid sun exposure. Patients with illnesses or taking medication that weaken the body’s defences are also more likely to develop this skin condition.
Is disseminated superficial actinic porokeratosis hereditary?

Yes. On average about half of the children of an affected parent will be predisposed to developing this skin condition, but a certain amount of accumulated sun exposure is required for it to appear.

What are the symptoms of disseminated superficial actinic porokeratosis?

It does not usually cause trouble. The affected areas usually feel dry and rough, however exposure to sun can cause them to itch and grow in size and number.

What does disseminated superficial actinic porokeratosis look like?

DSAP normally starts as a brownish red or brown spot and can grow from 2 mm up to 20 mm in diameter. The affected area normally has a thinned centre surrounded by a ridge-like border. Sweating is normally absent within this area.

How is disseminated superficial actinic porokeratosis diagnosed?

A sample of the affected area may be removed under local anaesthetic for microscopic examination in the laboratory (known as a skin biopsy). However, the appearance of the affected area, along with the history, may enable a doctor to make the diagnosis.

Can disseminated superficial actinic porokeratosis be cured?

Unfortunately there is no cure for DSAP. The best way to avoid developing or worsening of this skin condition is to avoid exposure to the sun.

How can disseminated superficial actinic porokeratosis be treated?

In most people no treatment is necessary and reassurance can be offered. No single treatment has been proven to improve DSAP dramatically and treatments all have significant side effects so may not be available on the NHS. Methods which have been used include the following:

**Cryotherapy.** Liquid nitrogen is sprayed onto the lesions, destroying the abnormal cells. This can be uncomfortable and may result in scarring. (See Patient Information Leaflet on [Cryotherapy](#))
**Creams - 5-fluorouracil, or imiquimod.** These creams destroy the abnormal skin cells in sun-damaged area of DSAP. A vigorous reaction may occur which is a sign that the condition is more likely to respond. The reaction settles on completion of a course of treatment. (See Patient Information Leaflets on [5-fluorouracil](#) and [Imiquimod Cream](#)).

Other creams used include topical vitamin D analogues.

**Surgical methods.** This is done under local anaesthetic by scraping the lesions off with a sharp spoon-like instrument (curette) which may leave a scar.

**Photodynamic therapy.** (See Patient Information Leaflet on [Photodynamic Therapy](#))

**Laser treatment.** Several different lasers have been used successfully to treat DSAP. Several sessions several weeks apart may be required. This may result in scarring.

**Emollients.** This does not eradicate the lesions, but may soften the appearance and feel of them.

This condition is usually harmless, but many patients with DSAP have had significant exposure to the sun and may also have other skin lesions caused by sun damage including skin cancer. It is therefore important to see your GP or skin specialist if you notice any new or changing skin lesions.

**Self care (What can I do?)**

The most important precaution to take is to protect your skin from sun damage. The following top sun safety tips are recommended:

**Top sun safety tips:**

- Protect your skin with clothing, and don’t forget to wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Stay in the shade between 11am and 3pm when it is sunny. Step out of the sun well before your skin reddens or burns.
- When choosing a sunscreen look for SPF 30 or more to protect against UVB, and the UVA circle logo and/or 4 or 5 UVA stars to protect against UVA. Apply plenty of sunscreen 15 to 30 minutes before going
out in the sun, and reapply every two hours and straight after swimming and towel-drying.

- Avoid sunbeds.
- The British Association of Dermatologists recommends that you tell your doctor about any changes to a mole or patch of skin. If your GP is concerned about your skin, make sure you are referred to an accredited Dermatologist (an expert in diagnosing skin cancer). Your doctor can refer you for free through the NHS.
- Sunscreens should not be used as an alternative to clothing and shade, rather they offer additional protection. No sunscreen will provide 100% protection.
- It may be worth taking Vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce Vitamin D levels.

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<th>Vitamin D advice</th>
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<td>The evidence relating to the health effects of serum Vitamin D levels, sunlight exposure and Vitamin D intake remains inconclusive. Avoiding all sunlight exposure if you suffer from light sensitivity, or to reduce the risk of melanoma and other skin cancers, may be associated with Vitamin D deficiency.</td>
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Individuals avoiding all sun exposure should consider having their serum Vitamin D measured. If levels are reduced or deficient they may wish to consider taking supplementary vitamin D3, 10-25 micrograms per day, and increasing their intake of foods high in Vitamin D such as oily fish, eggs, meat, fortified margarines and cereals. Vitamin D3 supplements are widely available from health food shops.

Where can I get more information about disseminated superficial actinic porokeratosis?

Web links to detailed leaflets:

www.dermnetnz.org/scaly/dsap.html

Links to patient support groups:

www.dsap.net

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.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: its contents, however, may occasionally differ from the advice 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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