



## **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 manifested by multiple, dry, scaly rings, each measuring up to 1 cm (1/2 inch) across. They are found mainly on the forearms and legs. It is due to excessive sun exposure 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 twice as likely to develop in women compared with men and is more common in lighter skin type. It normally develops between 30-50 years of age. It is not contagious.

### **What causes disseminated superficial actinic porokeratosis?**

Sun and/or ultraviolet light exposure causes DSAP. This condition tends to affect people with fair skin who burn easily and 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 (including sun beds). Patients taking medication or with illnesses that weaken the body's immune system 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 could develop DSAP, although a certain amount of accumulated sun exposure is required for it to appear.

## **What are the symptoms of disseminated superficial actinic porokeratosis?**

DSAP is usually asymptomatic. The affected areas often feel dry and rough. However, exposure to sun can cause them to itch and grow in size (still remaining small) 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 2 cm (1/2 inch) in diameter. The affected area normally has a thinned centre surrounded by a ridge-like border.

DSAP itself is harmless. However, many people with DSAP have had significant exposure to the sun and so 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.

## **How is disseminated superficial actinic porokeratosis diagnosed?**

A sample of the affected area may be removed under local anaesthetic by a dermatologist 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 worsening of this skin condition is to avoid exposure to the sun and regular use of sunblock.

## **How can disseminated superficial actinic porokeratosis be treated?**

There is no effective treatment for DSAP and some of the treatments that are offered may have significant side effects or may not be available on the NHS. Methods which have been tried in the past include the following:

**Emollients.** Regular use of emollients is important because while this will not cure the lesions of DSAP it but may soften the appearance and feel of them.

**CAUTION:** This leaflet mentions 'emollients' (moisturisers). Emollients, creams, lotions and ointments contain oils which can catch fire. When emollient products get in contact with dressings, clothing, bed linen or hair, there is a danger that a naked flame or cigarette smoking could cause these to catch fire. To reduce the fire risk, patients using skincare or haircare products are advised to be very careful near naked flames to reduce the risk of clothing, hair or bedding catching fire. In particular smoking cigarettes should be avoided and being near people who are smoking or using naked flames, especially in bed. Candles may also risk fire. It is advisable to wash clothing daily which is in contact with emollients and bed linen regularly.

**Cryotherapy.** Liquid nitrogen is sprayed onto the lesions, destroying the abnormal cells. This procedure is performed by a trained practitioner. It can be very uncomfortable and may result in scarring, which can be more noticeable than the original lesion (See Patient Information Leaflet on [Cryotherapy](#)).

**Creams - 5-fluorouracil, or imiquimod.** These creams destroy the abnormal skin cells in sun-damaged areas of DSAP. A vigorous skin reaction consisting of redness and soreness 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](#)).

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

**Photodynamic therapy.** This involves a special light which activates a cream, which was applied to the affected area of skin. This treatment kills the abnormal cells in the skin. (See Patient Information Leaflet on [Photodynamic Therapy](#))

**Laser treatment.** Several different types of laser have been used to treat DSAP. Several sessions several weeks apart may be required, under specialist guidance. This may result in scarring.

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

The most important precaution to take is to protect your skin from sun damage:

#### *Top sun safety tips*

- Protect your skin with adequate clothing, wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses. Choose sun protective clothing (with permanently sun-protective fabric, widely available for adults and children) if you have fair skin or many moles.
- Spend time in the shade between 11am and 3pm when it's sunny. Step out of the sun before your skin has a chance to redden or burn.
- When choosing a sunscreen look for a high protection SPF (current recommendations are SPR 50 or 50+) 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.
- Keep babies and young children out of direct sunlight.
- 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 you are advised to see a Consultant Dermatologist – an expert in diagnosing skin cancer. Your doctor can refer you for free through the NHS.
- Sunscreens are not an alternative to clothing and shade, rather they offer additional protection. No sunscreen will provide 100% protection.

### **Vitamin D advice**

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.

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:*

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[www.dermnetnz.org/scaly/dsap.html](http://www.dermnetnz.org/scaly/dsap.html)

*Links to patient support groups:*

[www.dsap.net](http://www.dsap.net)

For details of source materials use please contact the Clinical Standards Unit ([clinicalstandards@bad.org.uk](mailto: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: 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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