PATIENT INFORMATION LEAFLET

DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS

WHAT ARE THE AIMS OF THIS LEAFLET?

This leaflet has been written to help you understand more about disseminated superficial actinic porokeratosis (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 with multiple, dry, scaly rings, each measuring up to 1 cm across. They are found mainly on the forearms and legs, in sun-exposed sites. It is sometimes confused with actinic keratosis which is also caused by sun exposure; however, actinic keratoses are 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.

There are many other types of porokeratosis, which affect different age groups or present in slightly different ways, but they are not discussed here.

WHAT CAUSES DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS?

DSAP is thought to be caused by different factors. Genes may play a role, but ultraviolet light exposure is thought to be the main cause. This condition tends to affect sun-exposed areas on people with white skin who burn easily and tan poorly in the sun. It may appear more obvious in summer and less obvious in winter. Individual with weakened immune system, due to illness or medications are also more likely to develop this skin condition.

IS DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS HEREDITARY?

In some cases, DSAP may run in families. If a parent has DSAP, there is a chance their children could develop it too. However, long-term sun exposure may also play a role, and sometimes DASP can arise even without a family history.

WHAT DOES DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS FEEL AND LOOK LIKE?

DSAP is usually without symptoms. The affected areas often feel dry and rough to touch. However, sun exposure can cause them to itch or sting and grow in size and number.

DSAP normally starts as a brownish-red or brown spot and can grow from 2 mm up to 1 cm in diameter. The affected area normally has a thinned centre surrounded by a pink or red ridge-like border.

IS DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS CANCEROUS?

DSAP is generally harmless but, in very rare cases, individuals may be at risk of developing a type of skin cancer called squamous cell carcinoma (SCC) at the affected site This tends to present as an enlarging raised lump within the original DSAP, which may be painful. Therefore, it is important to monitor the area and let your GP or dermatologist know if there is any change. The risk is higher for rarer subtypes like linear porokeratosis or giant porokeratosis.

Many people with DSAP have also had significant exposure to the sun and so may also have other skin lesions caused by sun damage including skin cancer.

HOW IS DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS DIAGNOSED?

Sometimes 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, is usually sufficient to enable a doctor to make the diagnosis.

CAN DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS BE CURED?

There is no cure for DSAP. The best way to avoid the worsening of this skin condition is to avoid sun exposure , use sunblock regularly and monitor the lesions for changes.

HOW CAN DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS BE TREATED?

There is no effective treatment for DSAP to date and some of the available treatments may have significant side effects or may not be available on the NHS. Many treatments do not make a difference to the long-term outcome of the condition. For most individuals, no treatment is necessary.

However, if the rash is itchy or if the appearance is troublesome, 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.

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.

Creams. Creams like *5-fluorouracil* or *imiquimod* 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 at the end of treatment. It is common for the condition to return after treatment with these creams has stopped.

Topical retinoids. Tretinoin cream and adapalene gel have been effective for some individuals with DSAP, and do not cause as much inflammation but take much longer to work.

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 and can be painful during the process.

Laser treatment. Several different types of lasers have been used to treat DSAP, but this treatment is often not available in the NHS. Several sessions several weeks apart may be required, under specialist guidance. This may result in scarring.

Oral retinoids. In very severe cases, acitretin and isotretinoin tablets have been used. The DSAP also frequently reoccurs on stopping the medication.

CAUTION:
This leaflet mentions 'emollients' (moisturisers). Emollients, creams, lotions and ointments contain oils. When emollient products get in contact with dressings, clothing, bed linen or hair, there is a danger that they could catch fire more easily. There is still a risk if the emollient products have dried. People using skincare or haircare products should be very careful near naked flames or lit cigarettes. Wash clothing daily and bedlinen frequently, if they are in contact with emollients. This may not remove the risk completely, even at high temperatures. Caution is still needed. More information may be obtained at *www.gov.uk/guidance/safe-use-of-emollient-skin-creams-to-treat-dry-skin-conditions*.

SELF-CARE (WHAT CAN I DO?)

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

Top sun safety tips

- Sun protection is recommended for all people. It is advisable to protect the skin from further sun damage.
- Protect your skin with clothing. Ensure that you wear a hat that protects your face,

neck and ears, and a pair of UV protective sunglasses.

- Make use of shade between 11 am and 3 pm when it's sunny.
- It is important to avoid sunburn, which is a sign of damage to your skin and increases your risk of developing a skin cancer in the future. However, even a tan is a sign of skin damage and should be avoided.
- Apply a high sun protection factor (SPF) sunscreen of at least 30. However, if you have an organ transplant, it is recommended to use SPF 50, which has both UVB and UVA protection all-year round. Look for the UVA circle logo and choose a sunscreen with 5 UVA stars as well as a high SPF, like this:

- Use this sunscreen every day to all exposed areas of skin, especially your head (including balding scalp and ears) and neck, central chest, backs of hands, forearms and legs, if exposed.
- Apply plenty of sunscreen 15-30 minutes before going out in the sun (ideally, apply it twice) and reapply every two hours when outdoors. You should especially re-apply straight after swimming and towel-drying, even if the sunscreen states it is waterproof.
- Make a habit of sunscreen application, applying sunscreen as part of your morning bathroom routine. If you have an oily complexion, you may prefer an oil-free, alcohol-based or gel sunscreen.
- 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 should be referred to see a consultant dermatologist or a member of their team at no cost to yourself through the NHS.
- No sunscreen can offer you 100% protection. They should be used to provide additional protection from the sun, not as an alternative to clothing and shade.
- Routine sun protection is rarely necessary in the UK for people of colour, particularly those with black or dark brown skin tones. However, there are important exceptions to this. For example, sun protection is important if you have a skin condition, such as photosensitivity, vitiligo or lupus, or if you have a high risk of skin cancer, especially if you are taking immunosuppressive treatments (including organ transplant recipients) or if you are genetically pre-disposed to skin cancer. Outside of the UK in places with more extreme climates, you may need to follow our standard sun protection advice.
- Regardless of skin colour, you should still protect yourself from other risks to your health during especially hot weather, such as overheating, heat exhaustion or heatstroke. Follow NHS advice on www.nhs.uk/conditions/heat-exhaustion-heatstroke/.
- Babies and children can easily overheat, which can be very dangerous to their health. Take additional precautions to avoid them getting sun stroke or heat stroke, such as making use of shaded areas and keeping them hydrated.

- It may be worth taking vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce your vitamin D levels.

WHERE CAN I GET MORE INFORMATION ABOUT DISSEMINATED SUPERFICIAL ACTINIC POROKERATOSIS?

Web links to detailed leaflets:

www.dermnetnz.org/scaly/dsap.html

Jargon Buster:
www.skinhealthinfo.org.uk/support-resources/jargon-buster/

Please note that the British Association of Dermatologists provides web links to additional resources to help people access a range of information about their skin condition. The views expressed in these external resources may not be shared by the Association or its members.

Vitamin D advice

The evidence relating to the health effects of serum vitamin D levels, exposure to sunlight and vitamin D intake, is inconclusive. People who are avoiding (or need to avoid) sun exposure may be at risk of vitamin D deficiency and should consider having their serum vitamin D levels checked. If the levels are low, they may consider:

- taking vitamin D supplements of 10-25 micrograms per day
- increasing intake of food rich in vitamin D such as oily fish, eggs, meat, fortified margarine and cereals.

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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