PATIENT INFORMATION LEAFLET

SQUAMOUS CELL CARCINOMA *IN SITU*

WHAT ARE THE AIMS OF THIS LEAFLET?

This leaflet has been written to help you understand more about squamous cell carcinoma *in situ* (Bowen disease). It tells you what it is, what causes it, what can be done about it, and where you can find more information.

WHAT IS SQUAMOUS CELL CARCINOMA *IN SITU*?

Squamous cell carcinoma *in situ* (SCC *in situ*) is a growth of cancerous cells located in the outer layer of the skin. It is often called 'Bowen disease' or 'Intraepidermal carcinoma (IEC)'. SCC *in situ* is not a serious condition, but it can, very occasionally, progress to an invasive skin cancer known as squamous cell carcinoma (SCC). For this reason, dermatologists usually treat, or at least monitor, SCC *in situ*.

WHAT CAUSES SQUAMOUS CELL CARCINOMA *IN SITU* ?

Most cases of SCC *in situ* develop as a result of long-term sun exposure. People who have a weakened immune system and are on long term immunosuppression medication are more likely to get SCC *in situ*. Very occasionally, SCC *in situ* may develop after radiotherapy, longstanding arsenic ingestion (very rare nowadays) or due to the human papillomavirus (a common virus that can cause viral warts). SCC *in situ* is not infectious and is not caused by an allergy.

IS SQUAMOUS CELL CARCINOMA *IN SITU* HEREDITARY?

No, but some of the factors that increase the risk of getting it, such as a fair skin and a tendency to burn in the sun, do run in families.

WHAT ARE THE SYMPTOMS OF SQUAMOUS CELL CARCINOMA *IN SITU*?

Often there are no symptoms, although the rough surface may catch on clothing.

WHAT DOES SQUAMOUS CELL CARCINOMA *IN SITU* LOOK LIKE?

A patch of SCC *in situ* starts as a small red scaly area on the skin, which grows very slowly. It may reach a diameter of a few centimetres across. It commonly occurs on skin that has been exposed to the sun, especially the face, scalp, and neck, as well as the hands and lower legs. There may be more than one area of skin affected. The development of an ulcer, lump or pain within a patch, may indicate the formation of invasive squamous cell cancer.

HOW WILL SQUAMOUS CELL CARCINOMA *IN SITU* BE DIAGNOSED?

A patch of squamous cell carcinoma *in situ* can look rather like other scaly skin conditions, such as psoriasis. For this reason, it is often examined under a dermatoscope (a magnifying tool used to examine the skin). Sometimes a biopsy (a small sample of skin) may be taken to make the diagnosis.

CAN SQUAMOUS CELL CARCINOMA *IN SITU* BE CURED?

Yes. SCC *in situ* is confined to the surface of the skin and there are a variety of ways in which it can be removed (see below).

HOW CAN SQUAMOUS CELL CARCINOMA *IN SITU* BE TREATED?

Several treatments are available for Bowen disease:

- *Freezing the area with liquid nitrogen (cryotherapy).* This is carried out in the clinic. It can sometimes be painful, and can cause redness, puffiness, blistering or crusting, and may be slow to heal. It can be done in stages for large patches. However, it is less suitable for patches on the lower legs, or other sites where there is poor healing.
- *Curettage.* This involves scraping off the abnormal skin under a local anaesthetic. The area then heals with a scab, like a graze.
- 5-fluorouracil cream*.* This is a cream that may control or completely remove SCC *in situ*. There are different ways of using it, and your doctor will explain to you how to best use it. It works by killing the abnormal skin cells. This means that the skin will become red and look worse during treatment, but this is temporary. After completing the course of treatment, the skin reaction should settle down over time. It the reaction was severe, then there is a risk of skin discolouration or scarring.
- *Imiquimod cream*. This cream was originally developed for the treatment of genital warts but has been found useful in treating SCC *in situ*. It also causes inflammation of the skin during treatment.
- *Excision.* Depending on the size and location of the lesion, the abnormal skin may be cut out under local anaesthetic. This involves cutting around the lesion and, in most cases, the skin will then be stitched and this may leave a scar. If this method of treatment is chosen, you will be informed about the type of surgery planned and any potential complications.
- Photodynamic therapy*.* A cream is applied to the skin which makes the cells in the patch of SCC *in situ* sensitive to particular wavelengths of light. Light from a specially designed lamp is then shone onto the patch. This treatment can be painful and cause inflammation; however, any inflammation should settle down within a few days.
- *Radiotherapy and laser* are other therapies occasionally used for the treatment of SCC *in situ*. Lasers are not available in every hospital and radiotherapy is usually reserved for people whose condition has reoccurred or who do not benefit from other treatment.

A particular problem with SCC *in situ* is that it frequently occurs on the lower legs. The skin on the lower legs is often tight and sometimes quite fragile, especially in older people. Healing in this area is slow. Many factors, therefore, play a part in selecting the right treatment:

- The size and thickness of the affected patch
- The number of patches
- Whether there is swelling of the legs
- The general condition of the skin on the legs
- The patient's preference

If your dermatology team thinks that the area is small and unlikely to cause problems, you may have to be observed in a clinic or by your GP.

SELF-CARE (WHAT CAN I DO?)

From now on, you should take precautions to prevent additional patches of squamous cell carcinoma in situ developing:

- Check your skin regularly for new patches.
- The smaller your patch of squamous cell carcinoma *in situ* is, the better the results of treatment are likely to be. If you think another patch is developing, see your doctor about it promptly.
- If the patch changes in any way (e.g. bleeds, ulcerates or develops a lump) contact your doctor as soon as possible as this could be the start of an invasive skin cancer.

Top sun safety tips

Sun protection is recommended for all patients. It is advisable to protect the skin from further sun damage (for example, by wearing a hat, long sleeves and a sunscreen with a high sun protection factor).

- Protect your skin with clothing. Ensure 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.
- Use a 'high protection' sunscreen of at least SPF 30 which also has high UVA protection. Apply sunscreen generously 15 to 30 minutes before going out in the sun and make sure it is reapplied frequently when in the sun.
- Keep babies and young children out of direct sunlight.
- The British Association of Dermatologists recommend 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 a Consultant Dermatologist at no cost to yourself through the NHS. You can check your doctor's qualifications by searching for them on the GMC register – a Consultant Dermatologist will be listed as being on the Specialist Register for Dermatology.
- No sunscreen can offer 100% protection and should therefore 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.
- It may be worth taking vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce your vitamin D levels.

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.

WHERE CAN I GET MORE INFORMATION?

Patient support groups:

Macmillan Cancer Support
89 Albert Embankment
London, SE1 7UQ
Tel: 0808 808 2020 / 0808 800 1234
Web: www.macmillan.org.uk

Cancer Research UK
PO Box 123, Lincoln's Inn Fields London, WC2A 3PX
Tel: 020 7242 0200
Web: http://www.cancerhelp.org.uk

Links to other Internet sites:

www.dermnetnz.org/lesions/bowen.html

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

BRITISH ASSOCIATION OF DERMATOLOGISTS

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