



INFORMATION ABOUT SKIN CANCER FOR PATIENTS WITH AN ORGAN TRANSPLANT

What are the aims of this leaflet?

This leaflet has been written to help you understand the risk of developing skin cancer after receiving an organ transplant. It explains the importance of early detection and treatment of skin cancers. It describes the main types of precancerous and cancerous skin growths, how you can reduce the risk of getting skin cancer, and how skin cancer can be treated.

Why should I read this leaflet?

If you are going to have, or have had an organ transplant, it is important that you take good care of your skin. This is because people having transplants are more at risk of developing skin cancer than other people.

This leaflet gives you some advice on looking after your skin and provides information on:

- The importance of early detection of skin cancers
- The importance of early treatment of skin cancers
- The way to decrease the risk of skin cancers

Why am I more at risk from skin cancer?

If you have had a transplant you will be given immunosuppressive drugs to prevent you rejecting the transplanted organ. These work by dampening down your immune (defence) system. However, these treatments also increase the risk of skin cancer and some benign tumours and infections.

How likely am I to get skin cancer?

All transplant patients are at risk of developing skin cancer and the risk increases with time. For instance, twenty years after transplantation, more

than half of all transplant patients will have had a skin cancer. Whilst all transplant patients are at risk, some are more likely than others to develop skin cancer. Patients with any of the following characteristics are at significantly increased risk for skin cancer:

- Fair skin that burns easily
- Blue, green, grey or hazel eyes
- Red or blonde hair
- Numerous freckles
- Outdoor work or heavy sun exposure in the past
- History of skin cancer
- Family history of skin cancer

On the other hand, if you are of African, Arab, Asian, or Oriental descent you are less likely to develop common types of skin cancer than other transplant patients. However, you may still develop less common types of skin cancer so please don't ignore your skin.

SKIN CANCER DETECTION

How can I spot signs of skin cancer?

Treatment will be much easier if your skin cancer is detected early. Check your skin for changes once a month. You may need to use a mirror or to take photographs of your skin and compare to them. A friend or family member can help you with this checking.

You should see your doctor if you have any marks on your skin which are:

- Growing
- Bleeding
- Changing in appearance in any way
- Never healing completely

Below, we describe what skin cancers and related lesions look like.

- ***Actinic keratoses (also known as solar keratoses)***

Skin cancers may be preceded by a pre-cancerous condition known as actinic keratoses. These are usually pink or red, with a rough surface, which appear on skin that is exposed to the sun. The head, face, V of neck, backs of the hands and forearms are most often affected. Actinic keratoses may be easier to feel than they are to see, as they feel rough to the touch. Early treatment may prevent them changing into skin cancer. Most actinic keratoses, however, will never become cancerous.

- **Basal cell carcinoma (rodent ulcer)**
Most basal cell carcinomas (BCC) are painless. People often first become aware of them as a scab that bleeds occasionally and does not heal completely. Some basal cell carcinomas are very superficial and look like a scaly flat red or brown mark: others show a white pearly rim surrounding a central crater. If left for years, the latter type can erode the skin, eventually causing an ulcer - hence the name "rodent ulcer". Other basal cell carcinomas are quite lumpy, with one or more shiny translucent nodules crossed by small but easily seen blood vessels.
- **Squamous cell carcinoma**
A squamous cell carcinoma (SCC) usually appears as a scaly or crusty area of skin, with a red, inflamed base. It may look like an irritated wart or break down to form a bleeding ulcer. Most small squamous cell carcinomas are not painful, but pain in a growing lump is a suspicious sign for squamous cell carcinoma. They occur most often on the head, neck, ears, lips, back of the hands and forearms. SCC is 65 times more common in transplant recipients than in the general population and SCC is the most frequent type of skin cancer in organ transplant patients.
- **Melanoma**
Melanomas are much rarer but are potentially a serious type of skin cancer. They are usually an irregular brown or black spot, which may start in a pre-existing mole or appear on previously normal skin. Any change in a mole, or any new mole occurring for the first time after the age of thirty, should be shown to your doctor. Some melanomas are skin coloured so any rapidly growing skin lump should be shown to your doctor.

Remember, if you see **any change** in your skin, whether an ulcer or a spot you must tell your doctor or nurse. Any skin lump that becomes tender or painful should alert you to seek the opinion of a skin specialist.

How is skin cancer diagnosed?

If your doctor thinks that the mark on your skin needs further investigation, a small piece of the abnormal skin (a biopsy), or the whole area (an excision), will be cut out and examined under the microscope. You will be given a local anaesthetic beforehand to numb the skin.

SKIN CANCER PREVENTION

There are many ways in which you can help to reduce your chance of getting skin cancer, these are:

- Learn how to recognise the early signs
- Examine your skin regularly for these signs
- Get an annual check from your doctor or nurse
- Protect yourself from the sun and prevent yourself from burning
- Do not use sunlamps and sunbeds

Exposure to the sun is the main cause of skin cancer. This does not just mean sunbathing; you expose yourself to the sun each time you do any outdoor activities, including gardening, walking, sports, or even a long drive in the car. The sun can cause problems all year round, not just in the summer.

You can take some simple precautions to protect your skin by following these 'tips' for sun protection measures:

- Apply a high sun protection factor (SPF) sunscreen of 30-50, which has both UVB and UVA protection. Look for the UVA circle logo and choose a sunscreen with 4 or 5 UVA stars as well as a high SPF.
- Use this sunscreen every day to all exposed areas of skin especially your head and neck, central chest, backs of hands and forearms.
- Apply plenty of sunscreen before going out in the sun (ideally apply it twice) and reapply every two hours when outdoors, especially re-apply straight after swimming and towel-drying.
- 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 alcohol-based or gel sunscreen.
- Wear protective, tightly woven clothing, including long-sleeved shirts and trousers, sunglasses and a broad-brimmed hat that shades your face, neck and ears (we recommend brims that are at least 4 inches). Consider purchasing UV protective swim and beach wear which can particularly assist in protecting the trunk when swimming on holiday.
- Plan outdoor activities to avoid sun exposure between 11 a.m. and 3 p.m. when the sun's rays are strongest. Step into the shade before your skin has a chance to redden or burn.
- Sunscreens are as well as, not instead of, clothing and shade. No sunscreen will provide 100% protection.
- Remember that winter sun, such as on a skiing holiday, can contain just as much of the damaging ultra-violet light as summer sun.
- Do not sunbathe and never use sunbeds or sunlamps.
- It may be worth taking Vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce Vitamin D levels. If you have had a kidney transplant, discuss this first with your kidney specialist.

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.

SKIN CANCER TREATMENT

Can skin cancer be cured?

Most skin cancers, if treated early, can be cured. That is why it is important to report any new or changing skin lesion to your doctor. Basal cell carcinomas can be cured in almost every case and seldom, if ever, spread to other parts of the body. Treatment may be more complicated if they have been neglected for a very long time, or if they are in an awkward place - such as near the eye, nose or ear. In a few cases, squamous cell carcinoma and melanoma may spread (metastasise) to lymph glands and other organs.

How can skin cancer be treated?

- **Surgery:** most skin cancers are excised (cut out) under a local anaesthetic. After an injection to numb the skin the tumour is cut away along with some clear skin around it. Sometimes, a small skin graft is needed. A special type of surgery called Mohs micrographic surgery is sometimes needed to assure complete removal of a skin cancer while sparing normal skin.
- **Curettage and cautery:** this is another type of surgery, done under local anaesthetic, in which the skin cancer is scraped away (curettage) and then the skin surface is sealed (cautery).
- **Cryotherapy:** freezing the skin cancer with a very cold substance (liquid nitrogen). This is often used for pre-cancers or viral warts.
- **Creams:** these can be applied to the skin. The two used most commonly are 5-fluorouracil (5-FU) and imiquimod. There are

also other creams that may be used such as Solaraze gel, Picato gel and Actikerall cutaneous solution. These cream treatments are used for pre-cancers such as actinic keratosis or Bowen's disease.

- **Photodynamic therapy:** this involves applying a cream to the skin cancer under a dressing for 4-6 hours. A special light is then shone on to the area and this destroys the skin cancer or pre-cancer.
- In some patients with multiple cancers or more serious types of skin cancer, it may be advised that their immunosuppressant medication is reduced.
- In some circumstances, retinoid pills may be prescribed. Retinoids are a derivative of vitamin A and they can help to normalise the skin.

Remember

Most skin cancers can be avoided if you follow these basic rules:

- Check your skin for changes regularly
- Report any skin changes to your doctor or nurse promptly
- Always protect yourself from the sun
- Do not use sunlamps or sunbeds

Where can I find out more about skin cancer?

Several other leaflets produced by the British Association of Dermatologists on related topics are also available on this website: '[Actinic keratoses](#)', '[Basal cell carcinoma](#)', '[Bowen's disease](#)', '[Keratoacanthoma](#)', '[Melanoma](#)', and '[Squamous cell carcinoma](#)'.

Macmillan Cancer Support

89 Albert Embankment,
London SE1 7UQ

Free helpline for emotional support: 0808 808 2020

Free helpline for information: 0808 800 1234 (open Monday-Friday 9am-8pm)

Website: www.macmillan.org.uk

Cancer Research UK

Lincoln's Inn Fields, London, WC2A 3PX

Website: www.cancerresearchuk.org/sunsmart/

Wessex Cancer Trust - SCIN (Skin Cancer Information Network) and MARC'S Line (Melanoma and Related Cancers of the Skin)

Marc's Line Resource Centre,

Dermatology Treatment Centre,
Level 3, Salisbury District Hospital,
Salisbury, Wiltshire SP2 8BJ
Tel: (01722) 415071
Fax: (01722) 415071
Website: <http://wessexcancer.org/support-services/>

<http://www.dermnetnz.org/systemic/transplant.html>
http://www.itns.org/uploads/ITNS_Skin_Cancer_English.pdf
<http://www.bsscii.org.uk/long-term-immunosuppressing-medicines/>
<http://www.bad.org.uk/for-the-public/skin-cancer>

This leaflet is based on recommendations adapted from those of the French Society of Dermatology, the British Association of Dermatologists and Cancer Research UK's Sunsmart Campaign.

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: 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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