



BASAL CELL CARCINOMA

WHAT ARE THE AIMS OF THIS LEAFLET?

This leaflet has been written to help you understand more about basal cell carcinomas. It tells you about what they are, what causes them, what can be done about them and where you can find out more about them.

WHAT IS A BASAL CELL CARCINOMA?

A basal cell carcinoma (BCC) is a type of skin cancer. There are two main categories of skin cancer: melanoma and non-melanoma skin cancer. BCC is the most common type of non-melanoma skin cancer worldwide. In the UK, cases have increased by 39% between 2000-2011. BCCs are sometimes referred to as “rodent ulcers”.

WHAT CAUSES BASAL CELL CARCINOMA?

The most common cause is exposure to ultraviolet (UV) light from the sun or from sunbeds. BCCs can occur anywhere on the body but are most common on areas that are exposed to the sun such as your face, head, neck and ears. It can rarely develop in a longstanding scar or be a part of rare genetic syndromes. BCCs are not infectious.

BCCs mainly affect fair skinned adults, but other skin types are also at risk. Those with the highest risk of developing a basal cell carcinoma are:

- People with pale skin who burn easily and rarely tan (especially those with light coloured or red hair, although some people with dark hair still have fair skin).
- Those who have had a lot of exposure to the sun, such as people with outdoor hobbies or outdoor workers, and

people who have lived in sunny climates.

- People who have used sun beds or have regularly sunbathed.
- People who have previously had a basal cell carcinoma.

ARE BASAL CELL CARCINOMAS HEREDITARY?

Apart from some rare genetic conditions, such as one called Gorlin syndrome (<https://gorlinsyndrome.org/about-gorlin-syndrome/>), BCCs are not thought to be hereditary. However, some factors which increase the risk of getting one (e.g. a fair skin, a tendency to burn rather than tan, and freckling) do run in families.

WHAT DOES A BASAL CELL CARCINOMA LOOK LIKE?

BCCs can vary greatly in their appearance, but people often first become aware of them as a scab that bleeds and does not heal completely or a new red or pearly lump on the skin. Some BCCs are superficial and look like a scaly red flat mark on the skin. Others form a lump and have a pearl-like rim surrounding a central crater and there may be small red blood vessels present across the surface. If left untreated, BCCs can eventually cause an ulcer; hence the name “rodent ulcer”. Most BCCs are painless, although sometimes they can be itchy or bleed if caught.

HOW WILL MY BASAL CELL CARCINOMA BE DIAGNOSED?

Sometimes the diagnosis is clear from the clinical appearance. A skin biopsy can be performed under local anaesthetic to confirm the diagnosis. A skin biopsy involves an injection of local anaesthetic into the skin

to make it numb, then removal of a small piece of skin, which may be followed by a stitch.

CAN BASAL CELL CARCINOMAS BE CURED?

Yes, BCCs can be cured in almost every case, although treatment can be more complicated if the BCC has been neglected for a long time, or if it occurs in an awkward place to remove skin, such as close to the eye or on the nose or ear.

BCCs rarely spread to other parts of the body. Therefore, although it is a type of skin cancer it is almost never a danger to life. However, if a BCC is not treated early, it may get larger and may be more likely to come back. Large BCCs that are surgically treated may also leave larger scars, which may cause concern if they are on areas important to appearance, such as the face.

HOW CAN A BASAL CELL CARCINOMA BE TREATED?

The most common treatment for BCC is surgery. Usually, this means cutting away the BCC, along with some of the healthy skin around it, using local anaesthetic injection to numb the skin. The skin can usually be closed with stitches, but sometimes a skin graft is needed.

Other types of treatment include:

- **Mohs micrographic surgery** – This surgical procedure is used to treat more complex BCCs such as infiltrative type of BCC or recurrent BCCs *at difficult anatomical sites*. The procedure involves excision of the affected skin and examination of the skin removed under the microscope straight away to see if all of the BCC has been removed. If any residual BCC is left at the edge of the excision further skin is excised from that area and examined under the microscope. This process is continued until all of the BCC is removed. The resulting wound may be closed with

stitches, perhaps with a skin graft or sometimes just left to heal naturally. This is a time-consuming process and is only undertaken when simple surgery may not be suitable.

- **Radiotherapy** – shining X-rays onto the area containing the BCC usually delivered by the oncology team over a number of days. **Please note:** if you have Gorlin syndrome, you should not be treated with radiotherapy as there is a risk of increasing the number of BCCs.
- **Vismodegib** – this is a type of chemotherapy that has become available for the treatment of very complex BCCs, e.g. locally advanced BCCs or the very rare BCC that has spread to other parts of the body. This treatment has limited availability in the UK NHS.
- **Superficial BCCs:**
 - **Curettage and cautery** – the skin is numbed with local anaesthetic and the BCC is scraped away (curettage) and then the skin surface is sealed by heat (cautery).
 - **Cryotherapy** – freezing the BCC with liquid nitrogen.
 - **Creams** – these can be applied to the skin. The two commonly used are **imiquimod cream** and **5-fluorouracil cream** (5-FU).
 - **Photodynamic therapy** – a special cream is applied to the BCC which is taken up by the cells that are then destroyed by exposure to a specific wavelength of light. This treatment is only available in certain dermatology departments.

BCC is often treated with surgery. The choice of other treatments depends on the site and size of the BCC, the condition of the surrounding skin and number of BCC to be treated (some people have multiple). The overall state of health of each person to be treated is also taken into account. In some cases, the reasonable option is no treatment at all – this happens when the lesion is growing very slowly and is at a non-critical



site of the body, in people with a low chance of recovery.

SELF-CARE (WHAT CAN I DO?)

Treatment will be much easier if your BCC is detected early. BCCs can vary in their appearance, but it is advisable to see your doctor if you have any marks or scabs on your skin which are:

- growing
- bleeding and never completely healing
- changing appearance in any way

Check your skin for changes once a month. A friend or family member can help you particularly with checking areas that you cannot easily inspect, such as your back. You can also take some simple precautions to help prevent a BCC appearing:

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.
- 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 you reapply frequently when in the sun.
- 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.
- 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?

Clinical guidelines:

British Association of Dermatologists guidelines for the management of adults with basal cell carcinoma 2021

<https://onlinelibrary.wiley.com/doi/10.1111/bjd.20524>

Web links to other relevant sources:

Early detection and prevention of skin cancer

<https://www.skinhealthinfo.org.uk/symptoms-treatments/skin-cancer/>

Sun safety

<https://www.skinhealthinfo.org.uk/sun-awareness/the-sunscreen-fact-sheet/>

<https://www.skinhealthinfo.org.uk/sun-awareness/sun-advice-for-skin-of-colour/>

<https://www.skinhealthinfo.org.uk/sun-awareness/sun-protection-advice-for-children-and-babies/>

Vitamin D

<https://www.skinhealthinfo.org.uk/sun-awareness/vitamin-d-inform>

Additional sources

<http://www.skincancer.org/basal-cell-carcinoma.html>

<http://emedicine.medscape.com/article/276624-overview>

<http://www.dermnetnz.org/lesions/basal-cell-carcinoma.html>

Jargon Buster:

<https://www.skinhealthinfo.org.uk/support-resources/jargon-buster/>

Please note that the BAD provides web links to additional resources to help people access a range of information about their treatment or skin condition. The views expressed in these external resources may not be shared by the BAD or its members. The BAD has no control of and does not endorse the content of external links.

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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