

Skin Cancer

J A S C A P

**JEET ASSOCIATION FOR SUPPORT TO CANCER PATIENTS
MUMBAI, INDIA**

JASCAP

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JASCAP is a charitable trust that provides information on various aspects of cancer. This can help the patient and his family to understand the disease and its treatment and thus cope with it better.

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Donation suggested Rs.25.00

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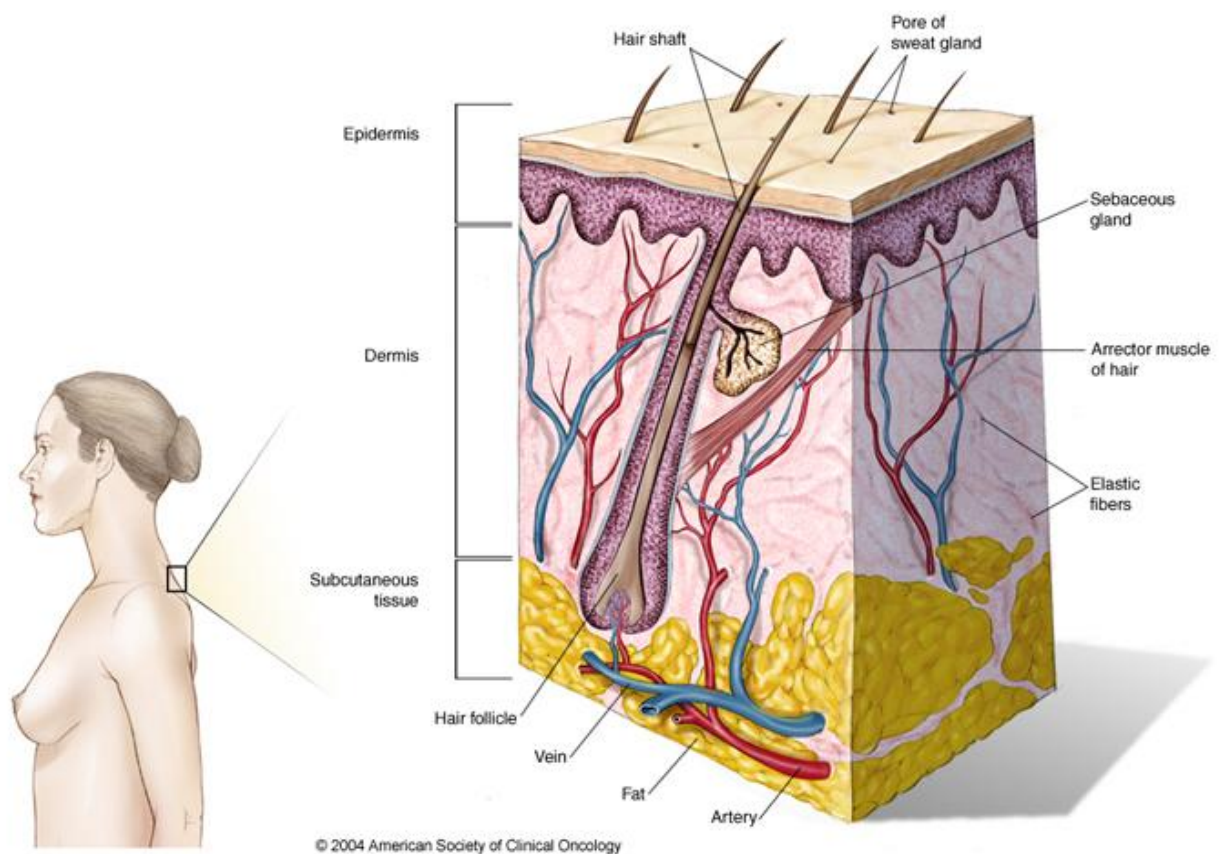
Skin Cancer

This booklet is for you if you have or someone close to you has Skin Cancer.

If you are a patient your doctor or nurse may wish to go through the booklet with you and mark sections that are particularly important for you. You can make a note below of the main contacts and information that you may need quickly.

Skin Cancer

Robert Morreale/Visual Explanations, LLC



Skin: Anatomy

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**** JASCAP has a separate factsheet on Bowen's disease.**

About skin cancer

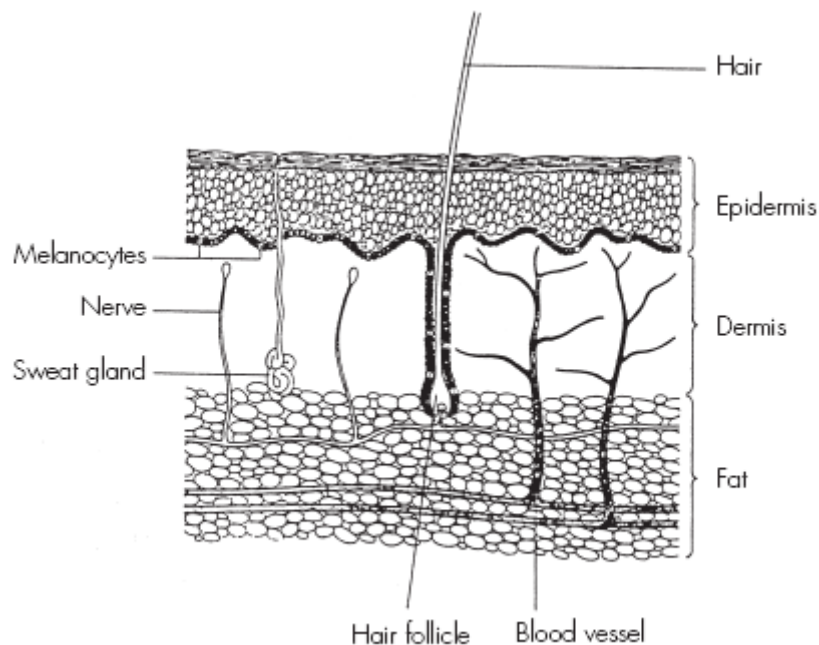
The skin

The skin has many purposes, it:

- protects the body from injury and infection
- helps to regulate body temperature
- helps to control fluid loss
- gets rid of waste substances through the sweat glands.

The skin is divided into three main layers: the outer layer known as the **epidermis** , a layer underneath known as the **dermis** and a deeper layer, which is made up of fatty tissue.

The epidermis contains three types of cells. Most of the epidermis is filled with cells known as **squamous cells** . At the base of the squamous cells are rounder cells called **basal cells**. In between the basal cells are other cells called **melanocytes** . Melanocytes are cells that produce the pigment **melanin** . It is this pigment that gives skin its colour variations.



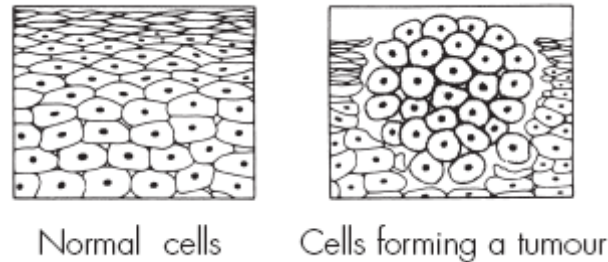
The structure of the skin

What is cancer?

The organs and tissues of the body are made up of tiny building blocks called cells. Cancer is a disease of these cells.

Cells in different parts of the body may look and work differently but most reproduce themselves in the same way. Cells are constantly becoming old and dying, and new cells are produced to replace them. Normally, cells divide in an orderly and controlled

manner. If for some reason the process gets out of control, the cells carry on dividing, developing into a lump which is called a **tumour**.



Tumours can be either **benign** or **malignant**. Cancer is the name given to a malignant tumour. Doctors can tell if a tumour is benign or malignant by examining a small sample of cells under a microscope. This is called a **biopsy**.

In a benign tumour the cells do not spread to other parts of the body and so are not cancerous. However, if they continue to grow at the original site, they may cause a problem by pressing on the surrounding organs.

A malignant tumour consists of cancer cells that have the ability to spread beyond the original area. If the tumour is left untreated, it may spread into and destroy surrounding tissue. Sometimes cells break away from the original (primary) cancer. They may spread to other organs in the body through the bloodstream or lymphatic system.

The lymphatic system is part of the immune system - the body's natural defence against infection and disease. It is a complex system made up of organs, such as bone marrow, the thymus, the spleen, and lymph nodes. The lymph nodes (or glands) throughout the body are connected by a network of tiny lymphatic ducts.

When the cancer cells reach a new area they may go on dividing and form a new tumour. This is known as a **secondary cancer** or **metastasis**. Even when cancer spreads somewhere else in the body, it is still the same kind of cancer, and is still named after the part of the body where it started. For example, if lung cancer spreads to the bones, it is still lung cancer, not bone cancer. In that case, it may be said that the person has "lung cancer with bone metastases."

It is important to realise that cancer is not a single disease with a single type of treatment. There are more than 200 different kinds of cancer, each with its own name and treatment.

Types of cancer

Carcinomas

The majority of cancers, about 85% (85 in a 100), are carcinomas. They start in the epithelium, which is the covering (or lining) of organs and of the body (the skin). The common forms of breast, lung, prostate and bowel cancer are all carcinomas.

Carcinomas are named after the type of epithelial cell that they started in and the part of the body that is affected. There are four different types of epithelial cells:

- squamous cells - that line different parts of the body, such as the mouth, gullet (oesophagus), and the airways
- adeno cells - form the lining of all the glands in the body and can be found in organs such as the stomach, ovaries, kidneys and prostate
- transitional cells - are only found in the lining of the bladder and parts of the urinary system
- basal cells - that are found in one of the layers of the skin.

A cancer that starts in squamous cells is called a squamous cell carcinoma. A cancer that starts in glandular cells is called an adenocarcinoma. Cancers that start in transitional cells are transitional cell carcinomas, and those that start in basal cells are basal cell carcinomas.

Leukaemias and lymphomas

These occur in the tissues where white blood cells (which fight infection in the body) are formed, i.e. the bone marrow and lymphatic system. Leukaemia and lymphoma are quite rare and make up about 6.5% (6.5 in 100) of all cancers.

Sarcomas

Sarcomas are very rare. They are a group of cancers that form in the connective or supportive tissues of the body such as muscle, bone and fatty tissue. They account for less than 1% (1 in 100) of cancers.

Sarcomas are split into two main types:

- bone sarcomas - that are found in the bones
- soft tissue sarcomas - that develop in the other supportive tissues of the body.

Others forms of cancer

Brain tumours and other very rare forms of cancer make up the remainder of cancers.

Types of skin cancer

There are three main types of skin cancer: basal cell carcinoma, squamous cell carcinoma and malignant melanoma.

Basal cell carcinoma

Basal cell carcinoma, or BCC, is a cancer of the cells at the bottom of the epidermis called the basal cells. It is very common and accounts for more than three-quarters (75%) of all skin cancers in the UK.

Each year more than 60,000 people in the UK develop BCC. Most BCCs are very slow-growing and almost never spread to other parts of the body. They often start as a small, red, shiny spot or nodule that may bleed occasionally.

In many BCCs, the skin over the top can remain intact for many months. Eventually they may develop into an ulcer which does not heal. When BCCs are treated at an early stage, most of the time they are completely cured. However, some BCCs are aggressive, and if left to grow they may spread to deeper layers in the skin and sometimes to bones, making treatment difficult. A small number of BCCs may also come back on the same area of skin after treatment – this is known as a **local recurrence** .

Squamous cell carcinoma

Squamous cell carcinoma, or SCC, is a cancer of the outermost cells of the skin. It's the second most common type of skin cancer in the UK. One in five skin cancers (20%) are this type.

Usually squamous cell carcinomas are slow-growing and only spread to other parts of the body if they are left untreated for a long time. But occasionally these cancers can behave more aggressively and spread at a relatively early stage. However, most people treated for squamous cell carcinoma are completely cured with simple treatment.

Malignant melanoma

Another less common type of skin cancer is called malignant melanoma. About 7,000 people in the UK are diagnosed with malignant melanoma each year. Melanoma behaves differently to basal cell and squamous cell cancers. It can grow quickly and needs to be treated early.

We have separate information on malignant melanoma .

Rarer types of non-melanoma skin cancer

There are a number of other rare types of non-melanoma:

- Merkel cell
- Kaposi's sarcoma
- Cutaneous T-cell lymphoma of the skin
- Sarcoma

These rare types make up less than 1 in 100 of all skin cancers (1%) in the UK.

Risk factors and causes of skin cancer

Sun exposure

Ultraviolet light (UVA and UVB) from the sun is the main environmental cause of most skin cancers. It's likely that most skin damage from ultraviolet light occurs

before the age of 20, but it doesn't show up until many years later. Damage to the skin below the age of 20 is an important risk factor in the development of basal cell cancers. Sun exposure over a lifetime is more significant for squamous cell cancers.

Skin cancer is becoming more common and there are several possible reasons for this. People are living longer and so their lifetime sun exposure is greater. They often spend more time enjoying outdoor activities and holidays in sunny climates, and many people still consider suntans to be healthy and attractive. Another reason why skin cancers appear more common is because awareness has increased over the last 20 years.

People who work outdoors for a living, such as farm workers, builders and gardeners, are at an increased risk of developing skin cancer because of prolonged exposure to the sun. This is relevant for both squamous cell and basal cell cancers.

Black- or brown-skinned people have an extremely low risk of developing skin cancer because the melanin pigment in their skin gives them protection. A fair-skinned person who tends to go red or freckle in the sun will be most at risk. Children and young adults who have been overexposed to the sun have an increased risk of developing some form of skin cancer especially if they are fair skinned. This will not show up until later on in life – usually after about the age of 40, and often not until the age of 60 or 70.

The regular use of sunlamps and sunbeds can increase the risk of developing some skin cancers but this is seen mainly in people who have used them excessively and regularly for many years.

Previous radiotherapy treatment

Radiotherapy given to treat other conditions can sometimes cause skin cancers, particularly basal cell cancers, in the treatment area later in life.

Lowered immunity

People who have to take drugs that lower their immunity (immunosuppressants) – for example, after a kidney transplant – are at an increased risk of getting skin cancer. Squamous cell cancers are most frequent but basal cell cancers and melanomas are also more common in these people than in the general population.

However, the reason for taking the immunosuppressants outweighs the potential risk of skin cancer. If you've had a transplant it's important that you see your doctor regularly to check for early signs of skin cancer.

Exposure to chemicals

Another rare possible cause for non-melanoma skin cancer is overexposure to certain chemicals at work. These include:

- coal tar
- soot
- pitch
- asphalt
- creosotes

- paraffin waxes
- petroleum derivatives
- cutting oils
- arsenic.

You should wear protective clothing if you are handling these substances frequently. Very small amounts of these chemicals used in the home are unlikely to cause skin cancer but you should follow the manufacturer's instructions for their use.

Genetic conditions

Most skin cancers are not caused by an inherited faulty gene that can be passed on to other family members, so members of your family are not likely to have an increased risk of developing it. However, families are likely to have the same skin type, which may increase their risk of developing a skin cancer.

People with certain rare hereditary conditions, such as Gorlin's syndrome or xeroderma pigmentosum (XP), have a higher risk of developing skin cancer.

How common is the Skin Cancer in India?

Skin cancer is one of the rare cancers diagnosed in India. It ranks lower than number 15 among all other cancers for people from the Indian subcontinent¹.

In India, between the years 2001-2003, across five urban centers - Mumbai, Delhi, Chennai, Bhopal and Bangalore, – and one rural center - Barshi, a total of 709 cases of Melanoma and other types of skin cancers were registered (1.60% of all cancers) for males across all age groups; while 479 cases of Melanoma and other types of skin cancers were registered (1.08% of all cancers) for females across all age groups. Considering all men, women and children with all types of cancers together, a grand total of 1,188 cases of Melanoma and other types of skin cancers (1.34% of all cancers) were registered at the six centers mentioned above, between the year 2001-2003².

The TATA Memorial Hospital (T.M.H.) in Mumbai, India registered a grand-total of 19,127 cases of all types of cancer patients in the year 2006 for men, women and children combined, out of which 60 (0.3% of the total cases) were diagnosed with the Melanoma of the skin, which is the major type of skin cancer in India. Out of the total 60 patients diagnosed with Melanoma of the skin, mentioned above at the T.M.H., 41 (68%) were males and 19 (32%) were females³.

¹ Globocan 2008: Cancer incidence and mortality rates worldwide

² Population based cancer registry 2001-2003 Mumbai, Delhi, Chennai, Bhopal, Barshi and Bangalore, Indian Cancer Society.

³ TATA Memorial Hospital Registry Data for 2006

Symptoms & diagnosis

Symptoms of skin cancer

Both basal cell and squamous cell cancers can appear in a variety of forms. They are usually painless and grow slowly. They can appear anywhere on your body but are most likely to occur on exposed skin, especially your face.

Basal cell cancers may:

- be smooth and pearly
- look waxy
- appear as a firm, red lump
- bleed sometimes
- develop a crust or scab
- begin to show signs of healing and yet never quite heal
- be itchy
- look like a flat, red spot which is scaly and crusty
- develop into a painless ulcer.

Squamous cell cancers most often develop in areas that have been damaged by exposure to the sun. They are mainly found on the face, bald scalps, arms, backs of hands and lower legs.

Squamous cell cancers have a scaly appearance and sometimes have a hard, horny cap. They can feel tender to touch.

Changes in your skin

If you notice anything unusual on your skin which does not go away within a month, you should show it to your doctor. However, there are many other conditions that may appear in the skin which are not cancer, especially in older people. You may want to have these treated for cosmetic reasons.

How skin cancers are diagnosed

Usually you begin by seeing your GP, who will examine you and decide whether to refer you to a hospital specialist for further tests and treatment. Some GPs can do minor operations. They may be able to take a sample of the skin (biopsy). This will be sent to the laboratory to be examined under a microscope.

However, many doctors would prefer to get a skin specialist to remove any suspected skin cancer.

At the hospital

Most people with suspected skin cancer are referred to a specialist at their local hospital for advice and treatment. A specialist in treating skin diseases is called a

dermatologist . However, depending on the area of the body affected by the cancer and the type of treatment needed you may also be referred to:

- a general surgeon
- a plastic surgeon.

Often these doctors work together and are known as a multidisciplinary team, or MDT. Other staff will be available to help if necessary, such as:

- specialist nurses who give information and support
- pathologists who advise on the type and extent of the skin cancer by examining tissue under the microscope
- oncologists (cancer specialists)
- counsellors and psychologists.

Biopsy

The specialist will be able to tell a great deal from a simple examination of the affected area of skin. However, it's not always possible to tell the difference between skin cancers and benign (non-cancerous) conditions by examination alone, so you may be advised to have a biopsy.

This is a quick and simple procedure which can usually be done in the outpatients department using a local anaesthetic. The doctor will remove all or part of the affected area and send it to the laboratory. In the laboratory it will be examined under a microscope by a pathologist.

Further tests

If you have a basal cell cancer, you probably won't need any further tests as long as the cancer has been completely removed. This is because basal cell cancers almost never spread.

If you have a squamous cell cancer, your doctor may want to examine you all over as well as taking a biopsy. This is to make sure that you don't need any further treatment as squamous cell cancers can occasionally spread.

The tests are particularly important if you've had treatment for skin cancer before and it has come back (recurred). During the physical examination, your doctor will probably feel the lymph glands close to the cancer to see if any of them are enlarged.

They may recommend that you have an operation to sample some of the nearby nodes if they think there's a risk that the cancer has spread to them. This is rare and will not be needed if you have a basal cell carcinoma (BCC).

Very occasionally, ultrasound, CT or MRI scans are done if your doctor thinks there's a possibility that the cancer has begun to spread. These scans are not usually needed when you are first diagnosed.

It may take 2-4 weeks for the results of the biopsy to be ready. A follow-up appointment to give you the results may be arranged before you go home.

This waiting period will be an anxious time for you. It may help to talk things over with a close friend or relative, or a support organisation .

Staging of skin cancers

The stage of a cancer is a term used to describe its size and whether it has spread beyond its original site. Knowing the extent of the cancer helps the doctors to decide on the most appropriate treatment. Most people with basal cell cancers do not need to have tests to find the stage of the cancer, as it is very rare for them to spread beyond the initial area of skin. Tests will only be done if the cancer is very large.

Although it is rare for squamous cell cancers to spread, tests to find the stage may be done because in some people they may spread.

A commonly used staging system is outlined below:

Stage 0 is also called carcinoma in situ. Carcinoma in situ means that cancer cells are present, but they are all contained in a small area in the top layer of skin (the epidermis). They have not started to spread or grow into deeper layers of skin. Squamous cell stage 0 is also called Bowen's disease. If it is not treated, it can develop into a squamous cell skin cancer.

Stage 1 The cancer is less than 2cm across and has not spread

Stage 2 The cancer is more than 2cm across and has not spread

Stage 3 The cancer has spread into the tissues under the skin and possibly to nearby lymph nodes

Stage 4 The cancer has spread to another part of the body. This very rarely occurs with either squamous or basal cell cancers of the skin.

TNM staging system

Another staging system known as the TNM system is commonly used. This can give more precise information about the extent of the cancer.

- **T** describes the size of the tumour.
- **N** describes whether the cancer has spread to the lymph nodes.
- **M** describes whether the cancer has spread to another part of the body (secondary or metastatic cancer).

Treating skin cancer

Treatment for skin cancer

More than 9 out of 10 people (90%) with basal cell and squamous cell cancers are completely cured by the original treatment. A list of treatments is below:

Types of treatment

Surgery is an important treatment for many skin cancers. Surgery can be done in a variety of ways. Small cancers can usually be removed under local anaesthetic.

When larger tumours are removed, skin grafts or flaps are sometimes needed to replace the removed skin. A skin graft is a thin layer of healthy skin taken from another part of the body. This is done under either a local or general anaesthetic. In many cases, surgery is the only treatment needed. Rarely, patients with squamous cell skin cancers will also have surgery to remove nearby lymph nodes .

Radiotherapy may be used instead of surgery. It can be a very effective alternative for basal and squamous cell cancers. Radiotherapy is often used in areas of the face where surgery might be difficult or cause unacceptable scarring. However, its use is not recommended in young people as it causes skin damage which becomes more visible over the years.

Radiotherapy may be given after surgery if there is a risk that some cancer cells may still be present. Sometimes it is used for tumours that have grown into the deeper layers of the skin.

Cryotherapy destroys cancer cells by using liquid nitrogen to freeze them. It is a very quick way of treating small, low-risk skin cancers.

Photodynamic therapy (PDT) is a newer treatment for skin cancer. It uses light sources, combined with a light-sensitive drug (sometimes called a photosensitising agent) to destroy cancer cells.

Topical chemotherapy Some early squamous cell carcinomas (SCCs) and superficial BCCs can be treated using a chemotherapy cream, containing a drug called 5FU (Efudix®). The cream is applied directly to the skin cancer and it works by destroying the cancer cells.

Topical immunotherapy Another cream that is used to treat some BCCs and SCCs uses the immune system to attack the cancer cells. The cream is also applied directly to the skin cancer and is known as imiquimod (Aldara®).

Planning treatment

Your doctor will plan your treatment taking into account a number of factors including:

- your age
- your general health
- the type of skin cancer
- the size of the cancer
- where it is on your body
- what the cells look like under the microscope.

You may be asked to take part in a clinical trial of a new treatment. A team of doctors and other staff will work together to decide the best treatment for you. They will follow national cancer treatment guidelines.

Discussing your treatment

Don't be afraid to ask your doctor or nurse if you have any questions about your treatment. It often helps to make a list of questions. You may want to take a close friend or relative with you to appointments. They can remind you of questions you want to ask, and afterwards help you remember what was said.

Giving your consent

Before you have any treatment, your doctor will explain its aims. You will usually be asked to sign a form saying that you give your permission (consent) for the hospital staff to give you the treatment. No medical treatment can be given without your consent. Before you are asked to sign the form you should be given full information about:

- the type and extent of the treatment you are advised to have
- the advantages and disadvantages of the treatment
- any other treatments that may be available
- any significant risks or side effects of the treatment.

If you don't understand what you have been told, let the staff know straight away so that they can explain again. Some cancer treatments are complex, so it's not unusual for people to need repeated explanations.

It's often a good idea to have a friend or relative with you when the treatment is explained. This can help you remember the discussion more fully.

People often feel that hospital staff are too busy to answer their questions, but it's important for you to be aware of how the treatment is likely to affect you. The staff should be willing to make time for you to ask questions. You can talk to the specialist nurse in dermatology at the hospital or our cancer support specialists on 0808 808 00 00.

Second opinion

Usually a number of cancer specialists work together as a team and they use national treatment guidelines to decide on the most suitable treatment for a person. Even so, you may want to have another medical opinion. Either your specialist, or your GP, should be willing to refer you to another specialist for a second opinion, if you feel it will be helpful.

Getting a second opinion may delay the start of your treatment, so you and your doctor need to be confident that it will give you useful information.

If you do go for a second opinion, it may be a good idea to take a friend or relative with you and have a list of questions ready, so that you can make sure your concerns are covered during the discussion.

Surgery for skin cancer

Surgery is the most common treatment for skin cancer. How it is done depends mostly on the size of the cancer.

Small cancers can often be removed by cutting them out (excision), or by a technique known as **curettage and electrocautery**.

Larger tumours are more likely to be cut out (excised) and the skin replaced with a skin graft or a skin flap if necessary.

A type of surgery called **Mohs micrographic surgery** (or margin-controlled excision) is used in some hospitals in the UK.

Excision

Many small skin cancers are removed by simple surgery. The surgeon or dermatologist will remove the lump and also some normal-looking skin around it to try to make sure that the cancer has completely gone.

You will have stitches that may need to be removed 5-14 days after your operation. Sometimes surgeons use stitches that dissolve and don't need to be removed.

Most operations will be done under local anaesthetic and you'll probably be able to go home the same day. The wound will be covered by a dressing. The staff at the hospital will explain how to take care of the area and the dressing. If necessary, they can arrange for your district nurse to change your dressings at home.

Skin grafts and skin flaps

If the tumour is large or spreading, a larger area of skin may have to be removed. You may then need a skin graft or, less commonly, a skin flap to cover the wound. Skin grafts and flaps are layers of skin taken from another part of the body and placed over the area from which the skin cancer has been removed.

A skin graft is a very thin layer of skin. The surgeon (often a plastic surgeon) will take a layer of skin from another part of the body (known as the donor site). The inner thigh is a common place from which to take the skin. It is then put over the area where the cancer has been removed.

A skin flap is a slightly thicker layer of skin which is taken from an area very close to the wound where the cancer has been removed. The flap is cut away but left partly connected so it still has a blood supply. It is moved over the wound and stitched in place. This is a very specialised type of surgery and you may have to travel to a different hospital to have it.

If you have a skin graft you can probably go home the same day. But if the graft is large, or if you have a skin flap, you may have to stay in hospital for up to four days. You may also have to stay in hospital if you have other health problems. With a skin graft you will normally have a dressing over the area to press the graft down. This helps it to create a good blood supply from the blood vessels underneath.

A skin graft for the face will usually be taken from behind the ear or the neck area to try to get a good match for the skin colour. The area where the graft has been placed will look very noticeable to begin with, but will heal within about two weeks or so. It will then fade so that it is less obvious.

Sometimes a graft is taken from the thigh area: this takes about two weeks or more to heal and may be a bit sore. The area from which the graft was taken will also become less noticeable when it has healed.

Mohs' micrographic surgery

This is very specialist surgery and is only available at a few hospitals in the UK. Your specialist may refer you to one of these centres if they think that this technique may be necessary for you.

In Mohs surgery, the tumour is removed piece by piece. As each piece is removed, it is examined under a microscope straight away. Skin tissue is gradually removed until there are no signs of any cancer cells. This technique aims to remove as little healthy skin as possible, while making sure that all the cancer has been taken away.

Mohs surgery is particularly useful for basal cell cancers that have come back in the same place, or where the doctor thinks that the cancer has begun to spread into the surrounding area. It is also sometimes used for skin cancers on the face (to minimise the effects of surgery) or for large skin cancers. The procedure is often done under local anaesthetic and you are usually allowed to go home the same day.

If you are having a large tumour removed, you may also need to have a skin graft or flap to cover the wound.

Curettage and electrocautery

This means scraping away the cancer and using heat or electricity to stop any bleeding. First you will be given a local anaesthetic. When the area is numb, the doctor will scrape away the cancer using a spoon-shaped instrument called a curette. An electrically heated loop or needle is then applied to cauterise the wound (stop any bleeding) and destroy any remaining cancer cells. Usually this treatment gives good cosmetic results. A few people may develop some scarring which may be more noticeable if you have fair skin.

Removing lymph glands

If there is evidence that squamous cell cancer has spread, you may need to have some lymph glands removed. This operation, called a lymphadenectomy, is done to see whether there are any cancer cells in the lymph glands. If cancer cells are present, removing the lymph glands can also help to prevent further spread. This is quite a large operation and is done under a general anaesthetic.

It is only necessary for a very small number of people who have squamous cell cancer and is not done for patients with basal cell cancer as these types of skin cancer almost never spread to the lymph nodes.

After a lymphadenectomy, you will have tubes (drains) in place to allow fluid to drain from the wound. These will be removed a few days after the operation.

Occasionally this operation may cause swelling of the affected area. The swelling is called lymphoedema and happens because lymph fluid cannot drain properly from the area after the lymph nodes have been removed.

Skin grafts for skin cancer

This information is about skin grafts for skin cancer . A skin graft is where skin is taken from one area of the body to cover a wound in another area.

Skin grafts

Surgery for all types of skin cancer involves removing the affected area and some of the surrounding, healthy-looking, skin.

If the area is fairly small, it will be possible to close the wound by bringing the edges of skin together. Larger wounds may need a skin graft to cover the area. Skin grafts are layers of skin taken from another part of the body (the donor site) and placed over the area where the cancer has been removed.

A partial thickness (or split thickness) skin graft is where the epidermis and a part of the dermis layer is used. The skin is usually taken from the thigh, buttock or upper arm. Skin will grow back in this area.

A full thickness skin graft is where the epidermis and the full dermis layers are used. In this case, only a small area is taken from the donor site and the skin edges of the donor site are then stitched together to heal. Skin may be taken from the neck, the area behind the ears and the inner side of the upper arm.

How a skin graft is done

You may have either a general or a local anaesthetic depending on the area being grafted. Your doctors will advise you which is best for you.

The grafted area

Once the skin layer has been removed from the donor site, it is placed over the wound where the cancer has been removed. It can then either be laid over the area or secured in place with stitches. You will have a dressing over the grafted area and this is left in place while the graft heals. The skin graft will connect with the blood supply from the area and this allows it to 'take' and survive. This usually takes 5–7 days.

The donor site

You will also have a dressing on the donor site to protect it from infection. For a partial thickness skin graft, healing will take about two weeks, but the area may remain red for some time after this.

With a full thickness graft, the donor area will take about five days to heal.

The donor area can often feel more uncomfortable than the grafted area and you may need to take regular painkillers.

After the surgery

You can usually go home the same day or you may need a short stay in hospital. This depends on where the graft is and how big it is.

If the grafted area is on your hand, you may have a sling to help keep your arm raised as much as possible. If the graft is on your leg, it is important to keep your leg up when possible. This helps prevent swelling and reduces pain.

You will need to take things gently for the first two weeks to allow the graft to heal properly. The grafted area is quite fragile, so it is important not to rub or brush against the graft or the dressing, or to put any pressure on the area.

Avoid any kind of exercise that might stretch or injure the graft for a few weeks. Start with some gentle exercise and build it up. You might need to take some time off work, depending on where the graft is and the kind of work you do. Your specialist will give you more advice on this.

Complications and side effects

Sometimes the grafted area may bleed or get infected. This may cause the graft to fail. It is important to contact your doctors if the area becomes painful, red and swollen. You are more likely to have problems with the graft if you smoke.

Both the grafted and donor areas will develop scars. These should gradually fade. They usually heal well with time, especially if they are on the face. Using a moisturising cream can help keep the skin supple.

There will be some difference between the grafted skin and the skin in the surrounding area. This should lessen over time. If you are concerned about the appearance of the area, you could try camouflage make-up. Some hospitals have specialist nurses who can show you the best way to apply this.

Your feelings

You may have many different emotions, including anxiety and fear. These are normal reactions and are part of the process many people go through in trying to come to terms with their condition.

How you feel about the way you look is an important part of self-esteem, so if your skin graft has affected your appearance even slightly, this can also have an effect on your feelings.

Everybody has their own way of coping with difficult situations; some people find it helpful to talk to friends or family, while others prefer to seek help from people outside their situation. Some people prefer to keep their feelings to themselves. There is no right or wrong way to cope, but help is available if you need it.

Cryotherapy for skin cancer

If your cancer is very small and only affecting the surface layers of the skin it may be possible to remove it by freezing it. This is called **cryotherapy** or **cryosurgery** . Liquid nitrogen is sprayed on the cancer to freeze it. The cold can be a bit painful when the liquid nitrogen is applied (some patients describe the feeling as like a bee-sting).

After the treatment you may feel an aching or throbbing sensation in the area for a minute or two. Within an hour or so the area may blister. This is to be expected, and the blister may contain blood. Fluid may need to be drained from the blister using a sterile needle, but the top of the blister should be left intact. The treated area needs to be covered with a dressing until a scab forms.

About two weeks after the treatment, the scab drops off and the cancer cells should have cleared. You may have a white scar in the area. Occasionally, you may need more than one cryotherapy treatment to get rid of the tumour completely.

Radiotherapy for skin cancer

Radiotherapy treats cancer by using high-energy rays to destroy the cancer cells, while doing as little harm as possible to normal cells.

Radiotherapy works well for skin cancers and is particularly useful in areas where surgery might be difficult or disfiguring (such as the face), and for tumours that have penetrated deeply into the skin.

The treatment is given in the hospital radiotherapy department. Often only a single treatment is needed, but sometimes several doses of treatment are necessary and these are given over a period of one or more weeks. Your doctor will discuss your individual treatment plan with you.

The radiotherapy treatment affects only a small area of skin and will not make you feel unwell. For a week or two after treatment, the treated skin will be red and inflamed. During this time, it will look as though the treatment has made things worse rather than better. This is normal. After a few weeks the area will dry up and form a crust or scab.

Over another week or so, the scab will peel away, leaving healed skin underneath. At first, this new skin will look pinker than the skin around it. This will gradually fade, and the treated area will come to look like the skin around it, although it can eventually be slightly paler.

Radiotherapy to areas that produce hair, such as the head, can make the hair fall out in the treated area. Your hair may grow back within 6–12 months, depending on the dose of radiotherapy and the length of treatment you've had. Some people find that the hair loss is permanent.

Your clinical oncologist can discuss with you whether your hair is likely to grow back once the treatment has ended. Radiotherapy does not make you radioactive and it is

perfectly safe for you to be around other people, including children, throughout your treatment.

Photodynamic therapy for skin cancer

Photodynamic therapy (PDT) is a newer treatment for skin cancer.

PDT uses light sources combined with a light-sensitive drug (sometimes called a photosensitising agent) to destroy cancer cells. PDT is particularly suitable in areas where the cancer develops in skin directly overlying bone, such as Bowen's disease on the shins and hands.

Before your treatment the doctor may remove any scabs from the area. A photosensitising cream (for example, Metvix®, which contains methyl aminolevulinate) will then be applied to your skin. It will be left on for a specific time period, usually between 3–6 hours, depending on the type of cream that is used. This is so that it can penetrate into the skin.

After the cream is removed, the doctor shines a special light onto the treatment area. The light treatment usually lasts somewhere between 8–45 minutes depending on the light source used.

Afterwards a dressing is put on to cover the area and protect it from light. You may need to keep the dressing on the treated area for up to 36 hours after your treatment. You will be given instructions about this before you leave hospital.

Usually only one treatment of PDT is needed, but occasionally two or three further treatments may be given if your skin cancer is thick. Your doctor or nurse will be able to give you more detailed information about your specific PDT treatment.

Side effects of PDT for skin cancer

Pain Before your PDT treatment, your doctor or specialist nurse may advise you to take a couple of paracetamol tablets to prevent any possible pain. For many people this is all they need, but occasionally a local anaesthetic is given before treatment.

At the end of treatment a steroid cream may be applied to the treated area to stop it becoming painful. When you go home you may be given steroid cream to use if the area becomes painful.

Sensitivity to light The treated area of skin will be sensitive to daylight and bright, indoor lighting. This effect will probably last for about 24 hours. You will need to keep the treated area of skin covered during this time to avoid the skin becoming burnt. After that you can wash, bathe or shower as usual, but you will still need to treat your skin gently and not rub the area until it has healed.

Healing

After PDT, a crust may form over the treated area. The crust will fall off naturally in a few weeks, leaving the healed new skin underneath. Usually there is no scarring and the appearance of the healed skin is very good.

Topical chemotherapy for skin cancer

If chemotherapy is used, it's usually applied directly to the skin cancer as a cream or lotion – this is called topical chemotherapy.

Usually a drug called 5-fluorouracil (Efudix®), which is commonly known as 5FU, is used. You will be asked to put the cream on at home. Your doctor or specialist nurse will explain how to do this.

The chemotherapy cream is usually applied once or twice a day for a number of weeks. If possible, a waterproof dressing should be put over the cream, although it can sometimes be difficult to put a dressing on some areas of the body.

The treatment should make the skin red and inflamed. Once the area becomes sore and weepy, the treatment will need to be stopped. Your doctor can prescribe a steroid cream to reduce the inflammation if it's too sore. The skin will take a week or two to heal after the treatment has finished.

Exposure to the sun can make the inflammation worse, so you should protect the area until it has healed. Usually there are no other side effects with this type of chemotherapy.

Topical immunotherapy for skin cancer

Immunotherapy is the name given to cancer treatments that use the immune system to attack cancer cells.

An immunotherapy cream called imiquimod (Aldara®) stimulates the immune system and may be used to treat some small, superficial basal cell cancers or Bowen's disease. It's usually used in areas where surgery may be difficult or for people who have more than one tumour.

You will be given the cream to take home and asked to apply it once a day for a number of weeks. Some redness or crusting of the skin occurs during the treatment but there should be no permanent scarring. If the skin reaction is very strong your doctor may give you a steroid cream to use.

Occasionally the cream may cause shivers with flu-like symptoms. If this is the case, you should let your doctor or specialist nurse know as they may advise you to stop using it.

Your doctor or specialist nurse can give you more detailed instructions on how to use your immunotherapy cream and how to manage any side effects.

Research - clinical trials for skin cancer

Cancer research trials are carried out to try to find new and better treatments for cancer.

Trials that are carried out on patients are known as clinical trials .

Clinical trials may be carried out to:

- test new treatments, such as new chemotherapy drugs, gene therapies or cancer vaccines
- look at new combinations of existing treatments, or change the way they are given, to make them more effective or to reduce side effects
- compare the effectiveness of drugs used for symptom control
- find out how cancer treatments work
- see which treatments are the most cost-effective.

Trials are the only reliable way to find out if a different operation, type of chemotherapy, radiotherapy, or other treatment is better than what is already available.

Taking part in a trial

You may be asked to take part in a treatment research trial. There can be many benefits in doing this. Trials help to improve knowledge about cancer and develop new treatments. You will also be carefully monitored during and after the study. Usually several hospitals around the country take part in these trials.

It is important to consider that some treatments that look promising at first are often later found not to be as good as existing treatments, or to have side effects that outweigh the benefits.

If you decide not to take part in a trial your decision will be respected and you do not have to give a reason. There will be no change in the way that you are treated by the hospital staff and you will be offered the standard treatment for your situation.

Living with skin cancer

Follow-up after treatment for skin cancer

For many people who have surgery for basal cell cancers and very early stage squamous cell cancers, no further follow-up will be required.

However, your doctor may want you to have regular check-ups for a time to make sure that the cancer has not returned, and the treatment has been fully successful. These check-ups are a good opportunity to discuss with your doctor any problems or worries you may have.

Once you have had one skin cancer you are at more risk of developing another skin cancer. You are also more at risk of developing a recurrence of your skin cancer at the site where you had it before. So it's important that you check the rest of your skin for any new symptoms or changes that could be cancer.

If you notice any new symptoms, or you have any worries, you should discuss them with your GP or specialist. For people whose treatment is over apart from regular check-ups, our booklet on adjusting to life after cancer gives useful advice on how to keep healthy and re-adjust to life after cancer.

How you might feel

Although your skin cancer is likely to be cured you may feel anxious or upset for a while. Talking to family and friends about how you are feeling often helps. You can also talk to your doctor or specialist nurse for advice and support.

Occasionally some people may need more advice and support from their healthcare professionals and family and friends. Sometimes it's easier to talk to someone who's not directly involved. Your specialist or GP can usually refer you to a trained counsellor who can help.

Preventing further skin cancers

Protecting yourself from the sun is even more important after you have had treatment for skin cancer.

There are precautions that you can take to protect your skin:

- Wear clothing made of cotton or natural fibres which are closely woven and offer good protection against the sun.
- Protect your face and neck with a wide-brimmed hat.
- Always wear sunglasses in strong sunlight.
- Use a high-factor sunscreen (SPF 30 or above) whenever you are exposed to the sun. Follow the instructions on the bottle and re-apply as recommended, particularly after swimming.
- Never allow your skin to burn.
- Minimise sun exposure during the hottest part of the day – usually between 11am–3pm.
- Use fake-tanning lotions or sprays rather than sitting in the sun or using a sunbed.

Living with and after cancer

Emotional effects

Information on the emotions you might experience as a result of your cancer diagnosis, ways that you might manage them and other sources of support.

Relationships and communication

Advice on how to talk to other people, talking to children, relationships and sexuality.

Note: JASCAP has booklets on the above subjects.

Questions you might like to ask your doctor or surgeon

You can fill this in before you see the doctor or surgeon, and then use it to remind yourself of the questions you want to ask, and the answers you receive.

1. _____

Answer _____

2. _____

Answer _____

3. _____

Answer _____

4. _____

Answer _____

5. _____

Answer _____

JASCAP : We need your help

We hope that you found this booklet useful.

To help other patients and their families we need and intend to extend our Patient information Services in many ways.

Our Trust depends on voluntary donations. Please send your donation by Cheque or D/D payable in Mumbai in favour of "JASCAP".

Note for Reader

This JASCAP booklet is not designed to provide medical advice or professional services and is intended to be for educational use only. The information provided through JASCAP is not a substitute for professional care and should not be used for diagnosing or treating a health problem or a disease. If you have, or suspect you may have, a health problem you should consult your doctor.

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