PROCEDURE

Skin cancer treatment

Skin cancer treatment removes or destroys cancer cells using surgery, medicines, radiation, or other targeted methods.

PURPOSE
Remove or control cancer while preserving healthy skin

PROCEDURE TYPE
Therapeutic; usually surgical, sometimes bedside or minimally invasive

WHERE DONE
Outpatient clinic or operating theatre

ANAESTHESIA
Local most often; sometimes none, sedation, or general

HOW LONG IT TAKES
15 minutes to several hours, based on treatment

PREPARATION
Medicine review; fasting only when sedation or general anaesthesia planned

RECOVERY
Same day usually; no driving after sedation or general anaesthesia

MAIN RISKS
Bleeding, infection, scarring, incomplete removal, recurrence

RESULTS
Treatment details immediately; pathology within several days to two weeks

Overview

Skin cancer treatment aims to remove, destroy, or control cancer cells while protecting as much healthy tissue as possible. The treatment may be a minor procedure in a clinic or a larger operation in an operating theatre.

The main skin cancer types are basal cell carcinoma, squamous cell carcinoma, and melanoma. Treatment also differs for less common cancers. Your plan is based on the cancer type, its depth and location, whether it has spread, and your general health.

Surgery is the most common treatment for skin cancer that has not spread. Other options include freezing, scraping, prescription creams, light-based treatment, radiation therapy, and medicines that work throughout the body.

Why the procedure is performed

Treatment may be performed to completely remove an early skin cancer. It may also remove remaining cancer after a biopsy, which is a procedure that takes a tissue sample for testing.

For larger or higher-risk cancers, treatment may help prevent cancer from growing into nearby structures or spreading elsewhere. Surgery can sometimes include checking or removing nearby lymph nodes. Lymph nodes are small immune system structures that can trap cancer cells.

When cancer cannot be fully removed, treatment may slow its growth, reduce bleeding or discomfort, and protect nearby tissue. Advanced melanoma or squamous cell carcinoma may require immunotherapy, targeted medicines, radiation, or a combination of treatments.

Who should and should not have it

Treatment is usually considered when a biopsy confirms skin cancer or when a suspicious growth needs to be removed and tested. The best method is not the same for every cancer.

A standard surgical excision may suit many skin cancers. Mohs surgery, which removes and examines thin layers one at a time, may be offered for cancers with a higher risk of returning or those in areas where saving healthy tissue is important.

Some treatments are suitable only for certain cancers. Prescription creams, freezing, or light-based treatment may be options for selected cancers limited to the skin's upper layers. They are not substitutes for surgery when a cancer is deeper or has a significant risk of spreading.

Treatment may be avoided, changed, or delayed when:

Blood thinners like warfarin or apixaban do not always prevent skin surgery. Do not stop one on your own. Your healthcare team will balance bleeding risk against the reason you take it.

In some people with serious health problems or limited life expectancy, observation may be discussed for a slow-growing cancer. This accepts the possibility that the cancer will enlarge and become harder to treat.

- An infection or another medical problem makes immediate treatment unsafe
- Anaesthesia or surgery would carry more risk than benefit
- A medicine could interfere with healing or increase bleeding
- Pregnancy affects the safety of a medicine, radiation, or anaesthetic plan

- The proposed treatment is unlikely to control that cancer type or stage

How to prepare

The treating facility's own instructions take priority because preparation differs between a clinic procedure, an operation under general anaesthesia, and radiation or medicine-based treatment.

Make sure your team knows about all prescription medicines, over-the-counter products, vitamins, and supplements you use. Tell them about blood thinners, allergies, previous reactions to anaesthesia, bleeding problems, implanted electrical devices, and any chance of pregnancy.

Most procedures using only local anaesthetic do not require fasting. If you will have sedation or general anaesthesia, follow the facility's instructions about when to stop eating and drinking.

You may be asked to wash the area and avoid makeup, lotions, or creams that day. Wear clothing that gives easy access to the treatment site. Arrange transport if you will receive sedation or general anaesthesia, or if the location of the wound could make driving unsafe.

What happens during the procedure

The details depend on the treatment selected.

Standard excision removes the cancer with a border, or margin, of nearby skin. The wound may be closed with stitches. A skin graft or flap may be needed for a larger wound. A graft uses skin from another area, while a flap moves nearby skin into the wound.

Mohs surgery removes the visible cancer and then thin layers beneath and around it. Each layer is examined under a microscope while you wait. More tissue is removed only where cancer cells remain.

Curettage and electrodesiccation uses a sharp, spoon-shaped instrument to scrape away tissue. An electrical current then treats the area and controls bleeding. It is mainly used for selected superficial cancers.

Cryosurgery freezes abnormal tissue, usually with liquid nitrogen. The treated area later blisters or crusts and heals.

Topical treatment uses prescription medicine placed on the skin over several weeks. Photodynamic therapy combines a light-sensitive medicine with a special light. Both may cause a strong local skin reaction.

Radiation therapy directs high-energy beams at the cancer. Treatment is usually divided into several visits rather than completed in one session.

If cancer has spread or cannot be treated locally, you may receive immunotherapy, targeted therapy, or another systemic treatment. "Systemic" means the medicine travels through the bloodstream.

Recovery and what to expect afterward

Pain: Mild soreness, burning, swelling, or tightness is common after local treatment. Follow your instructions for pain relief. Larger operations, grafts, and flaps may cause more discomfort.

Eating: You can usually eat normally after local anaesthetic. After sedation or general anaesthesia, start according to the recovery team's instructions. Nausea can occur after anaesthesia.

Activity: Keep the wound clean and follow the dressing instructions. You may need to avoid strenuous activity, bending, swimming, or lifting because these can stretch the wound or restart bleeding. Stitches may dissolve or may need removal.

Driving: Do not drive after sedation or general anaesthesia. Arrange a ride home. After local anaesthetic, driving may still be unsafe if a dressing blocks your vision, movement is restricted, or you have taken a medicine that causes drowsiness.

Work: Many people return to desk work within a day or two after a small procedure. More physical work may require extra time, especially if the wound is large or near a joint, eye, hand, or foot.

Risks and possible complications

All skin cancer treatments can have unwanted effects. The risks differ by treatment and body area.

Possible risks of surgery include bleeding, infection, wound separation, delayed healing, scarring, and changes in skin colour or sensation. Damage to a nearby nerve, muscle, or other structure is possible when a cancer is deep or in a complex area.

A graft or flap may partly or completely fail to heal. Surgery near the eye, nose, ear, or mouth can affect appearance or function. Your team should discuss reconstructive options before a larger procedure.

Freezing, scraping, creams, and photodynamic therapy can cause redness, crusting, swelling, pain, or colour changes. Because some of these treatments do not provide a complete specimen for laboratory testing, confirming that all cancer has been treated may be less certain.

Radiation can cause skin irritation during treatment and longer-term changes in colour, texture, or hair growth. Any treatment can leave cancer cells behind, and skin cancer can return after apparently successful treatment.

Results and follow up

Your team can usually tell you what was done immediately. If tissue was removed, a pathology laboratory examines it under a microscope. Results often take several days and sometimes up to two weeks.

The pathology report identifies the cancer type and describes important features. It may also state whether the edges of the removed tissue are clear of cancer. If cancer reaches an edge, further surgery or another treatment may be recommended.

Routine follow-up may include a wound check, stitch removal, discussion of pathology results, and later skin examinations. The schedule is based on the cancer type, stage, treatment, and risk of another skin cancer.

Protecting your skin from ultraviolet light and checking for new or changing spots remain important after treatment. These steps do not replace scheduled follow-up.

Alternatives

The meaningful alternatives depend on the exact cancer.

Standard excision is widely available and provides tissue for laboratory testing. Mohs surgery examines the margins during treatment and preserves more healthy skin, but it takes longer and is not needed for every cancer.

Scraping, freezing, prescription creams, or photodynamic therapy may avoid stitches. They are suitable only for selected superficial cancers, may cause several weeks of skin reaction, and may offer less certainty about complete removal.

Radiation avoids an operation and may help when surgery would be difficult. It usually requires repeated visits, can cause lasting skin changes, and may make later surgery more complex.

Observation avoids immediate treatment but allows the cancer to grow. It is generally

considered only when treatment burdens are likely to outweigh the benefits.

For cancer that has spread, systemic medicines may control disease that surgery cannot remove. These medicines affect the whole body and can cause immune-related or other significant side effects.

When to call your healthcare team

Contact your healthcare team promptly if you have increasing redness, warmth, swelling, drainage, worsening pain, fever, a wound that opens, or bleeding that returns repeatedly. Also call if a graft or flap becomes unusually pale, dark, cold, or increasingly painful.

Questions about dressings, expected swelling, pathology timing, stitch removal, or return to work can usually wait for routine office hours.

Seek emergency help for severe trouble breathing, fainting, confusion, signs of a serious allergic reaction, or bleeding that remains heavy after firm continuous pressure as instructed by your treatment team.

Common questions

Will I be asleep?

Most small skin cancer operations use local anaesthetic, so you are awake but the area is numb. Larger or complex operations may use sedation or general anaesthesia.

Can I drive home?

Not after sedation or general anaesthesia. After local anaesthetic, ask whether the wound, dressing, or treatment location could affect safe driving.

How painful is it?

The anaesthetic injection may briefly sting. You may feel pressure or movement during surgery, but not sharp pain. Soreness afterward is usually manageable, although larger procedures can hurt more.

When will I know whether all the cancer was removed?

Mohs results are usually available during the procedure. Standard excision results are available after laboratory testing, often within several days to two weeks.

Will I have a scar?

Any treatment that removes or destroys skin can leave a scar or colour change. Scars often

soften and fade over time, but they do not disappear completely.

Could I need more treatment?

Yes. Further treatment may be needed if cancer is found at the tissue edge, has high-risk features, has spread, or returns later.

Sources

- National Cancer Institute. Skin Cancer Treatment (PDQ®)-Patient Version
- National Cancer Institute. Melanoma Treatment (PDQ®)-Patient Version
- National Health Service. Treatment for non-melanoma skin cancer
- Bichakjian CK, Armstrong A, Baum C, et al. Guidelines of care for the management of basal cell carcinoma. Journal of the American Academy of Dermatology . 2018;78(3):540-559.
- Alam M, Armstrong A, Baum C, et al. Guidelines of care for the management of cutaneous squamous cell carcinoma. Journal of the American Academy of Dermatology . 2018;78(3):560-578.
- Swetter SM, Tsao H, Bichakjian CK, et al. Guidelines of care for the management of primary cutaneous melanoma. Journal of the American Academy of Dermatology . 2019;80(1):208-250.