

Skin Cancer—Overview

(Basal Cell Carcinoma; Squamous Cell Carcinoma)

by Laurie LaRusso, MS, ELS

En Español (Spanish Version)

Definition

Skin cancer is a disease in which cancer cells grow in the skin.

The two most common kinds of skin cancer are:

- Basal cell carcinoma (a slow-growing cancer that begins in the inner part of the outer layer of the skin; rarely spreads to other parts of the body)—It accounts for more than 90% of all skin cancers in the United States.
- Squamous cell carcinoma (a cancer that starts in the outer layer of the skin)—It rarely spreads, but does so more often than basal cell carcinoma.

Basal Cell Carcinoma

Basal cell carcinoma



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Cancer occurs when cells in the body (in this case, skin cells) divide without control or order. Normally, cells divide in a regulated manner. If cells keep dividing uncontrollably when new cells are not needed, a mass of tissue forms, called a growth or tumor. The term cancer refers to malignant tumors, which can invade nearby tissues and spread to other parts of the body. A benign tumor is unable to invade or spread.

It is important that skin cancers be found and treated early because they can invade and destroy nearby tissue. Another type of cancer that occurs in the skin is melanoma. There are also rare forms of skin cancer such as merkel cell carcinoma, sebaceous carcinoma, and eccrine carcinoma.

Causes

In genetically susceptible people, ultraviolet radiation from the sun is the main cause of skin cancer. But artificial radiation from sun lamps and tanning booths can also cause skin cancer.

Actinic keratosis is a precancerous lesion. It is caused by accumulated exposure to ultraviolet radiation from the

sun. If left untreated, it may progress to squamous cell carcinoma (which occurs approximately 10% of the time).

Risk Factors

A risk factor is something that increases your chance of getting a disease or condition.

Risk factors include:

- Fair skin that freckles easily
- Red or blonde hair
- Light-colored eyes
- Age: 50 or older
- Sex: male
- Race: White people who live in places where the sun's rays are strong year-round
- Excessive sun exposure without protective clothing or sunscreen
- Exposure to arsenic, industrial tar, coal, paraffin, and certain types of oil (for squamous cell carcinoma)
- Radiation treatment
- Light treatments for psoriasis, especially PUVA
- Chronic, nonhealing wounds (for squamous cell carcinoma)
- Certain genetic diseases such as basal cell nevus syndrome or xeroderma pigmentosum

Symptoms

Skin cancers are rarely painful. The most common first symptom of skin cancer is a change in the skin, such as a new growth or a sore that doesn't heal. When it starts, skin cancer may appear as:

- A small, smooth, shiny, pale, or waxy lump
- A firm red lump
- A lump that bleeds or develops a crust
- A flat, red spot that is rough, dry, or scaly

Skin cancers are found mainly on areas exposed to the sun:

- Head
- Face
- Ears
- Neck
- Hands
- Arms

However, skin cancer can occur anywhere.

These symptoms may also be caused by other, less serious health conditions. A person experiencing these symptoms should see a doctor if they last for more than two weeks.

Diagnosis

The doctor will ask about your symptoms and medical history, and perform a physical exam. If you have a growth like those listed above, your doctor may treat it in the office. This involves removing all or part of the lesion and sending it to the laboratory for a biopsy.

In cases where the growth is very large or has been present for a long time, the doctor will carefully check the lymph nodes in the area. You may also need to have more tests to find out if the cancer has spread to other parts of the body.

Treatment

Treatment for skin cancer usually involves surgery. In some cases, radiation therapy or chemotherapy may be used. Sometimes a combination of methods is used.

Treatments include:

Surgery

Many skin cancers can be cut from the skin quickly and easily. In fact, the cancer is sometimes completely removed during biopsy, and no further treatment is needed. Surgical techniques include:

Curettage and Electrodesiccation

This involves scooping the cancer out with a curette (an instrument with a sharp, spoon-shaped end). The area is treated with an electric current to control bleeding. This also kills any cancer cells remaining around the edge of the wound. This technique is used for very small or superficial cancers in noncosmetically vital areas.

Mohs' Surgery

Mohs' surgery involves the removal of all of the cancerous tissue. The surgeon will try to remove as little healthy tissue as possible. This method is used to remove:

- Large tumors
- Tumors in hard-to-treat places
- Tumors of undetermined shape and depth
- Cancers that have recurred

The procedure is performed by specially trained dermatologic Mohs surgeons. The cancer is shaved off one thin layer at a time. Each layer is checked under a microscope for cancer cells until the entire tumor is removed. This method offers the highest chance of a cure.

Simple Excision

For this treatment, a surgical knife is used to cut out the lesion.

Cryosurgery

Liquid nitrogen is used to freeze and kill the abnormal cells. After the area thaws, the dead tissue falls off. More than one freezing may be needed to remove the growth completely. This method may be used to treat precancerous skin conditions (actinic keratoses) and certain small or superficial skin cancers.

Laser Therapy

Laser therapy uses a narrow beam of light to remove or destroy cancer cells. This method is sometimes used for cancers that involve only the outer layer of skin.

Radiation Therapy (Radiotherapy)

Radiation therapy uses radiation to kill cancer cells and shrink tumors.

Topical Chemotherapy

Topical chemotherapy is the use of drugs, in the form of cream or lotion, to kill cancer cells. This method is successful in treating precancerous conditions and cancers limited to the outer layer of the skin. The most common topical chemotherapy used is a form of 5-fluorouracil (5-FU) or imiquimod cream.

Prevention

- Avoid spending too much time in the sun.
- Protect your skin from the sun with clothing, including a shirt, sunglasses, and a hat with a broad brim.
- Use sunscreens with a sun protection factor (SPF) of 15 or more on skin that will be exposed to the sun.
- Avoid exposing your skin to the sun between 10 AM-2 PM standard time, or 11 AM-3 PM daylight saving time.
- Don't use sun lamps or tanning booths.

Take the following precautions to find skin cancer early:

- If you have any of the symptoms listed above, have your skin examined by a doctor.
- If you have fair skin, have your skin checked by a doctor.
- Learn how to do a skin self-exam.

RESOURCES:

American Academy of Dermatology
<http://www.aad.org/>

American Cancer Society
<http://www.cancer.org/>

American College of Mohs Surgery
<http://mohscollege.org/>

Skin Cancer Foundation
<http://www.skincancer.org/>

CANADIAN RESOURCES:

Canadian Cancer Society
<http://www.cancer.ca/>

Canadian Dermatology Association
<http://www.dermatology.ca/english/>

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