

Definitions

Squamous cell: A thin, flat cell of the surfaces of the skin and linings of various organs.

Epidermis: The top layer of skin.

Carcinoma: A type of cancerous, or malignant, tumor originating on the surface of the body or in a solid organ.

Pathologist: A physician who examines tissues and fluids to diagnose disease in order to assist in making treatment decisions.

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Skin Cancer

Squamous Cell Carcinoma

What is squamous cell skin carcinoma?

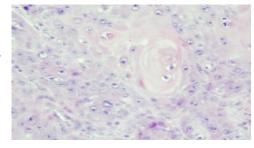
The second most common skin cancer, squamous cell skin carcinoma affects 250,000 Americans each year. This type of cancer begins and usually is confined to the epidermis for some time. This type of cancer has a high cure rate but can cause disfiguring, complications, or even death if it is neglected and allowed to spread.

Who is most likely to have squamous cell skin carcinoma?

This slow-growing disease affects individuals who have regular exposure to sunlight. Until

recently, this cancer was most common in older people, particularly men who worked outdoors. Now, however, more women and younger individuals are being diagnosed with squamous cell skin carcinoma, especially those who spend leisure time in the sun. People with fair skin; blonde or red hair; or blue, green or gray eyes have higher than average risk.

Avoid long exposure to the sun, especially at midday, to prevent squamous cell skin carcinoma. If outdoors for a long time, consider wearing a hat, sunscreen, long sleeves, and a long skirt or pants.



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What characterizes squamous cell skin carcinoma?

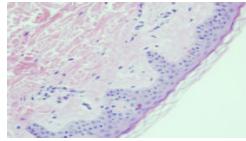
Squamous cell skin carcinoma occurs most frequently on areas of the body frequently exposed to the sun–the face, ears, neck, scalp, shoulders, and back. The rim of the ear and lower lip are especially

vulnerable to these cancers. Tumors sometimes develop on areas where the skin has suffered injury: sun damage, burns, scars, sores, or sites exposed to x-rays or chemicals. Chronic skin

inflammation also may encourage the development of squamous cell skin carcinoma.

Depending upon your risk factors, your physician may recommend that your skin be examined regularly to detect skin cancer. Watch for changes in size, color, texture, and appearance, as well as skin pain, bleeding, itching, crusting, or inflammation. Common characteristics of squamous cell skin carcinoma include a bleeding or non-healing sore, a reddish patch, or an elevated or wart-like growth. Also, pre-cancerous conditions such as

actinic keratosis, leukoplakia, and Bowen's disease can develop into squamous cell skin carcinoma.



Normal skin cells.

How does a pathologist diagnose squamous cell skin carcinoma?

Your primary care physician or specialist will gather a **biopsy specimen** from an area of the skin with squamous cell skin carcinoma characteristics for the pathologist to examine under a microscope.

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What kinds of questions should I ask my doctors?

Ask any question you want. There are no questions you should be reluctant to ask. Here are a few to consider:

- Please describe the type of cancer I have and what treatment options are available.
- What stage is the cancer in?
- What are the chances for full remission?
- What treatment options do you recommend? Why do you believe these are the best treatments?
- What are the pros and cons of these treatment options?
- What are the side effects?
- Should I receive a second opinion?
- Is your medical team experienced in treating the type of cancer I have?
- Can you provide me with information about the physicians and others on the medical team?

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How do doctors determine what surgery or treatment will be necessary?

The pathologist consults with your primary care or specialist physician after reviewing the biopsy test results. Together, using their combined experience and knowledge, they determine treatment options most appropriate for your condition.

What kinds of treatments are available for squamous cell skin carcinoma?

Depending upon the size, depth, and location of squamous cell skin carcinoma, it can be treated by topical medications, curettage and electrodessication, surgery, or radiation therapy. It's important to learn as much as you can about your treatment options and to make the decision that's right for you.

Common *topical medications* for the treatment of precancerous conditions or superficial squamous cell skin carcinoma include *imiquimod*.

Using *curettage and electrodessication*, the physician scrapes off the growth and desiccates the tumor site with an electrocautery needle.

Surgical approaches include **excisional surgery**, during which a surgeon removes the tumor along with a margin of normal skin as a safety margin. The pathologist examines the removed tissue to assure all cancer cells have been removed. Another surgical approach is **micrography surgery**, during which a physician removes the visible tumor and then removes surrounding skin one layer at a time. Each layer is checked under a microscope for signs of cancer until the physician is sure all the cancer is gone. This technique has a highest cure rate and can save the greatest amount of healthy tissue.

Cryosurgery is a technique that is performed without any cutting or anesthesia. Liquid nitrogen is applied to the tumor with a cotton-tipped applicator or spray device. The tumor then becomes dry and crusted and falls off. The procedure is repeated until the cancer is gone. Side effects may include temporary redness, swelling, or loss of pigment.

Laser surgery is often used for cancers on the lip, face, or scalp because this treatment provides surgeons with greater control over the depth of skin that is removed. Often used as a secondary therapy after the first option is unsuccessful, this option has a slightly higher risk of scarring or pigment loss.

Radiation therapy uses high-energy, pinpointed x-rays to kill cancer cells. This type of treatment is directed at a specific area. It can be used to treat small tumors, minimizing the damage to normal cells or tissue surrounding the tumor, or can be used to destroy cancer cells that remain after surgery.

Photodynamic therapy is best used on cancers on the face and scalp or if individuals have multiple malignancies. A physician applies a topical treatment that is activated by a strong light. The treatment destroys cancer while sparing surrounding tissue.

Clinical trials of new treatments for squamous cell skin carcinoma may be found at www.cancer.gov/clinicaltrials. These treatments are highly experimental in nature but may be a potential option for advanced cancers.

For more information, go to www.skincancer.org (Skin Cancer Foundation) or www.nlm.nih.gov (National Library of Medicine, National Institutes of Health). Type the keywords squamous cell skin carcinoma or skin cancer into the search box.

Healing begins with the pathologist's diagnosis. More than 70% of all decisions about your diagnosis, treatment, hospital admission, and discharge rest on the pathology report.