
SKIN CANCER

The skin is the largest organ in our body, and is made up of two major layers (epidermis and dermis), as well as various types of cells. The top (or outer) layer of the skin, the epidermis, is composed of three types of cells: flat, scaly cells on the surface called squamous cells; round cells called basal cells; and melanocytes, cells that provide skin its color and protect against skin damage.

The inner layer of the skin, the dermis, is the layer that contains the nerves, blood vessels, and sweat glands. Skin cancer is a disease in which cancerous (malignant) cells are found in the outer layers of your skin.

WHAT ARE THE SYMPTOMS OF SKIN CANCER?

Most skin cancers can be cured if diagnosed and treated early. Aside from protecting your skin from sun damage, it is important to recognize the early signs of skin cancer.

The ABCDEs of melanoma are a helpful guide: (A) Asymmetry; (B) Borders; (C) Color; (D) Diameter; (E) Evolution. The symptoms of melanoma skin cancer include:

- (A) Moles that are different on one side (asymmetry)
- (B) Irregular borders of a mole
- (C) Color variation including shades of brown and black, which could be concerning
- (D) Diameter or the size—if the mole is larger than 6 mm, a doctor should evaluate it
- (E) Moles or lesions that are different than the rest, or change in size, shape, or color over time are concerning (evolution)

Symptoms of non-melanoma skin cancer include:

- Itchy patches of skin that may crust over or are very painful

- Bumps or skin spots that bleed easily or crust over frequently
- Nodules (aggregation or swelling or abnormal swelling) that do not go away. These may be clear, a pearl-like color, or even red, pink, or white.
- Skin sores that do not heal
- A scar-like bump that was not caused by injury or trauma

If you notice any of the factors listed above, see your primary care provider, or an ENT (ear, nose, and throat) specialist, or otolaryngologist, right away. If you have a spot or lump on your skin, your ENT specialist may remove the growth and examine the tissue under the microscope. This is called a biopsy. A biopsy can usually be done in the ENT specialist's office, and usually involves numbing the skin with a local anesthetic. Examination of the biopsy under the microscope will tell the doctor if the skin lesion is a cancer (malignancy).

WHAT CAUSES SKIN CANCER?

Most skin cancers occur on sun-exposed areas of skin, and there is a lot of scientific evidence to support ultraviolet (UV) radiation as a causative factor in most types of skin cancer. Family history is also important, particularly in melanoma. The lighter your skin type, the more susceptible you are to UV damage and to skin cancer. You have a higher risk of developing skin cancer, and should be particularly careful about sun exposure, if you have any of these factors:

- Long-term sun exposure
- Fair skin (typically blonde or red hair with freckles) and lighter eye color
- Place of residence (increased risk in southern climates)

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- Presence of moles, particularly if there are irregular edges, uneven coloring, or an increase in the size of the mole
- Family history of skin cancer, particularly melanoma
- Use of indoor tanning devices
- Severe sunburns as a child
- Non-healing ulcers or nodules in the skin
- History of organ transplant or other immune system suppression

What Are the Different Types of Skin Cancer?

There are several types of cancer that originate in the skin. The most common types are basal cell carcinoma and squamous cell carcinoma. These types are classified as non-melanoma skin cancer. Melanoma is the third type of skin cancer. It is less common than basal cell or squamous cell cancers, but potentially much more serious. Other types of skin cancer are rare.

Basal cell carcinoma is the most common type of skin cancer (70 percent of all skin cancers). It typically appears as a small raised bump that has a pearly appearance. It is most commonly seen on areas of the skin that have received excessive sun exposure. These cancers may spread to the skin surrounding them, but rarely spread to other parts of the body.

Squamous cell carcinoma (20 percent of all skin cancers) is also seen on the areas of the body that have been exposed to excessive sun (nose, lower lip, hands, and forehead). Often this cancer appears as a firm red bump or ulceration of the skin that does not heal. Squamous cell carcinomas can spread to lymph nodes in the area.

Melanoma is a skin cancer (malignancy) that arises from the melanocytes in the skin. This makes up five percent of skin cancers. Melanocytes are the cells that

give color to our skin. These cancers typically arise as pigmented (colored) lesions in the skin with an irregular shape, irregular border, and multiple colors. It is the most harmful of all the skin cancers, because it can spread to lymph nodes or other sites in the body. Fortunately, most melanomas have a very high cure rate when identified and treated early.

WHAT ARE THE TREATMENT OPTIONS?

There are varieties of treatments available to treat skin cancer, including surgery, radiation therapy, and chemotherapy. Treatment for skin cancer depends on the type and size of cancer, your age, and your overall health.

Surgery is the most common form of treatment. It generally consists of an office or outpatient procedure to remove the lesion and check the edges, or margins, to make sure all the cancer was removed. For basal cell and squamous cell carcinomas, excision is frequently done using a specific technique called Mohs surgery, which gives the best chance to include all margins, while still minimizing the size of the defect. The site may then be repaired with simple stitches or skin from the same area or a different area of your body.

For melanoma treatment, your ENT specialist might also recommend doing a biopsy of the lymph node with the highest chance of having tiny microscopic metastatic cancer cells called a sentinel lymph node biopsy. If this biopsy is positive, further removal of more lymph nodes might be needed.

Sometimes radiation may be used as definitive therapy or additional treatment after surgery. For non-melanoma skin cancers, chemotherapy is not used as primary therapy, and its use after surgery is controversial. For melanomas, chemotherapy and medications that modulate the immune system may be used in more advanced cases.

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WHAT QUESTIONS SHOULD I ASK MY DOCTOR?

1. What are my risk factors for developing skin cancer and what can I do to minimize this risk?
2. What symptoms should I be looking for to see if I have skin cancer?
3. What type of skin cancer do I have?
4. What are the treatment options for my skin cancer?
5. What stage is my skin cancer?
6. Are there any topical medications that can be used to treat the skin cancer?
7. If surgery is indicated, what kind of surgery will I need? Can it be done in the office or will it require general anesthesia?
8. What kind of reconstruction (repair of the wound) will I need if I have surgery?
9. What will the scar look like?
10. Is there a chance for the cancer to have spread to another part of my body and do I need any imaging (such as a CT scan) to evaluate?
11. What is my risk of having other skin cancers?
12. What kind of follow up do I need after treatment of my skin cancer?
13. Are there any side effects of the treatment?
14. What happens if the cancer comes back or spreads?
15. What should I be looking out for to see if the cancer may be coming back?
16. Are there any clinical trials that may apply to me?