

Skin cancer

Patient information

What is cancer?

The human body is made up of billions of cells. In healthy people, cells grow, divide and die. New cells constantly replace old ones in an orderly way. This process ensures each part of the body has the right number and kinds of cells for good health.

Cancer cells multiply far faster than healthy cells. Also, they do not function like normal cells. They do not serve any useful purpose in the body. In fact, they can sometimes produce toxic substances. Also, they displace normal, healthy cells and compete for the body's resources.

Cells become cancerous when their DNA is damaged. DNA contains the "instructions" cells need to divide and function properly. People can inherit damaged DNA. This is why certain families or groups are at higher risk than others for some cancers. More often, DNA is damaged by exposure to something in the environment, like the toxic chemicals in cigarette smoke.

As the number of cancer cells increases, they often form a mass or lump. This is called a growth or tumor. Eventually, if the cancer cells continue to multiply, they begin to spread through the body. They can invade and damage nearby organs. Also, they can spread to other parts of the body, and start new tumours there. This is called metastasis.

Cancer cells must be killed or removed before they spread (metastasize) through the body. Otherwise, they will damage – and eventually destroy – vital organs.

What is skin?

Skin is sometimes called "the largest organ of the human body." It accounts for about 15 percent of the body's

total weight. Skin is made up of multiple layers of tissue, and is between two and three millimeters thick in most places. Typically, it contains blood vessels, sweat glands and pigmentation cells which give the skin its colour, and protect the body against sunlight.

What is skin cancer?

Skin cancer starts when cells in the skin become cancerous and start to multiply. The two main types of skin cancer are:

- Melanomatous skin cancer.
- Non-Melanomatous skin cancer, which includes Squamous Cell Cancer (SCC) and Basal Cell Cancer (BCC). BCC is the most common type of skin cancer.

Risk factors for skin cancer

Risk factors are things that increase people's chances of developing a disease. Risk factors can be:

- inherited (for example, a damaged gene that makes cancer more likely)
- environmental (for example, living in an area with serious air pollution)
- linked to lifestyle choices (for example, cigarette smoking)

The more risk factors for a certain disease you have, the more likely you are to get that disease.

Risk factors for skin cancer include:

- Long-term exposure to sunlight
- Location: the closer a person lives to the equator, the greater the risk.

- Age: skin cancer is most common between ages 40 and 70.
- Fair complexion.
- Tendency to sunburn easily.
- Moles and freckles on the skin.
- Outdoor occupation (e.g. construction).
- Arsenic exposure (e.g. to herbicides).
- Radiation exposure.
- Immunosuppressed states (e.g. chemotherapy, chronic steroid use, transplant recipient, AIDS).
- Personal or family history of skin cancer.
- Chronic skin irritation, scars, inflammation and/or burns.
- Hereditary diseases such as albinism or xeroderma pigmentosum.

Symptoms of skin cancer

Any change in skin condition may be a sign of skin cancer. Symptoms may include:

- New skin spots, or changes in old spots.
- Changes in size, shape or color of moles or freckles, or the skin around them.
- New lumps or bumps that don't go away.
- Hardening of the base of a skin lesion.
- Dry, scaly spots that bleed or ulcerate easily.
- Asymmetric skin spots without sharply defined borders.
- Spots of more than one color, including brown, black, red, blue or purple.

Untreated skin cancers can become bleeding, painful ulcers. They may spread to nearby lymph glands, causing pain, fatigue, weakness and weight loss.

Diagnosing skin cancer

A firm diagnosis of cancer must be made before treatment starts. Often, this is done using a procedure called a biopsy. A small piece of tissue is taken from the suspected cancer site and examined under a microscope. This lets doctors be sure that cancer cells are really present.

Doctors may also need to do other tests to see how far the cancer has spread. These might include tests such as CT (computed tomography) or MRI (magnetic resonance imaging) scans. These tests allow doctors to take detailed pictures of structures inside the body and see exactly where the cancer is.

Stages of cancer

Doctors stage or classify cancers according to how large they are, and how far they have spread from their original locations. Staging systems for different cancers can be complex and detailed. As a general rule however, the higher the stage number, the larger the cancer is, and the more it has spread. For example, a stage one cancer is relatively small, and has not spread far from its original site. A stage four cancer, on the other hand, is quite large, and has spread far away from its original site.

Treatments for skin cancer: overview

Most cancers are treated with surgery, radiotherapy (radiation) or chemotherapy – or some combination of these three therapies. Since every patient, and every case is unique, there is no “ideal” course of treatment. Your doctor will prescribe the treatment, or combination of treatments, which is best for you. Your treatment will depend on the stage of your cancer, your level of health and your medical history.

Treatments for skin cancer: surgery

Often, skin cancers must be surgically removed. How serious the surgery is, and how much tissue is removed depends on the stage of the cancer, what internal structures are affected and other factors such as your general level of health. Surgery for skin cancer may take one of the following forms:

- **Electrodesiccation and curettage:** in this procedure, the area around the lesion is frozen and a special, circular tool is used to scrape out the skin lesion. This is usually done in the doctor's clinic.
- **Cryosurgery:** in this procedure, a very cold substance is applied to the skin lesion to destroy it. This is usually done in the doctor's clinic.
- **Traditional surgery:** in this procedure, your doctor uses a scalpel to remove the entire lesion, and often some surrounding tissue as well. The wound is then closed with stitches. In some cases, skin may be taken from another area to cover defects left in the skin. This may be done in the doctor's clinic under local anaesthetic or in an operating room under general anaesthetic.

Surgery is usually very effective. However, it is often followed by other forms of therapy, to try and ensure all cancer cells have been eliminated.

Treatments for skin cancer: topical medications

For some skin cancers, your doctor may prescribe a topical medication, that is, a cream or ointment which is applied directly to the affected area to kill cancer cells. Generally, topical medication are applied several times a day for one to two weeks. If you are treated with topical medication, your doctor will give you precise directions on how and when to apply it.

Treatments for skin cancer: radiotherapy

In radiotherapy, doctors use tightly focused beams of radiation to kill cancer cells, while sparing as many healthy cells as possible. Radiotherapy is not at all painful. However, because the beams of radiation also kill healthy cells near the tumour, radiotherapy may cause side effects after treatment.

The most common side effect are:

- 1) **Skin problems:** skin may appear red, sunburned or feel irritated. This will go away after treatment ends.
- 2) **Fatigue:** many patients will feel extremely tired as a result of treatment.
- 3) **Loss of appetite:** radiotherapy, other cancer treatments or stress can result in loss of appetite. However, it is very important to eat well during cancer treatments.
- 4) **Loss of hair:** radiotherapy sometimes causes hair loss. Ask your doctor if he/she thinks this will happen in your case.

Chemotherapy

In chemotherapy, anticancer drugs are injected or taken by mouth. These drugs are specially designed to seek out and kill cancer cells. However, they can also damage normal cells. This causes side effects such as:

- nausea
- vomiting
- loss of appetite
- hair loss
- sores in the mouth

Anticancer drugs often affect the bone marrow, where blood cells are made. This decreases the number of

cells in your blood and can cause side effects such as:

- increased risk of infection
- bruising
- bleeding due to minor cuts
- shortness of breath
- tiredness
- weakness

Most of these side effects will disappear at the end of treatment.

Where can I get more information?

Don't hesitate to ask your doctor or any member of your healthcare team about your disorder or its treatment. It's important that you learn as much as you can about your condition. That way, you will know what to expect, and how you can help yourself stay as healthy as possible. Because your doctor knows the details of your case, he or she is the best person to answer your questions.

If you would like to read more about skin cancer, here are some useful websites with reliable information:

Canadian Cancer Society: **www.cancer.ca**

National Cancer Institute: **www.cancer.gov**

American Cancer Society: **www.cancer.org**

Cancer Care: **www.cancercare.org**

A Word from Your Doctor **Dr. Anthony Zeitouni**

Dear Patient,

As a healthcare professional, your well-being is very important to me. It is for this very reason that we are offering you this document to better inform you about the cancer you are battling.

If after having read this document you still have questions, please do not hesitate to ask them during your next appointment, or contact me at (514) 934-1934, ext. 34971.

Together we will beat cancer!



Special thanks

We would like to acknowledge the time and efforts of Dr. Maggie Aron who volunteered to write this document to better inform our patients.

Thank you Dr. Maggie Aron



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IMPORTANT : PLEASE READ

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