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Basal and Squamous Cell Skin Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

Catching cancer early often allows for more treatment options. Some early cancers may have signs and symptoms that can be noticed, but that is not always the case.

- Can Basal and Squamous Cell Skin Cancers Be Found Early?
- Signs and Symptoms of Basal and Squamous Cell Skin Cancers
- Skin Cancer Image Gallery
- Tests for Basal and Squamous Cell Skin Cancers

Stages of Basal and Squamous Cell Skin Cancer

After a skin cancer diagnosis, staging can provide important information about the extent of cancer in the body and anticipated response to treatment.

Basal and Squamous Cell Skin Cancer Stages

Questions to Ask About Basal and Squamous Cell Skin Cancers

Get some questions you can ask your health care team to help you better understand your diagnosis and treatment options.

- Questions to Ask About Your Basal or Squamous Cell Skin Cancer
- Questions to Ask Your Health Care Team about Skin Cancer (PDF)

Can Basal and Squamous Cell Skin Cancers Be Found Early?

Basal cell and squamous cell skin cancers can often be found early, when they are likely to be easier to treat.

Skin self-exam

Although the American Cancer Society does not have guidelines for the early detection of skin cancer, knowing your own skin is important to finding skin cancer early. Learn the patterns of moles, blemishes, freckles, and other marks on your skin so that you'll notice any changes.

Many doctors recommend checking your skin, preferably once a month. **Skin self-exams** are best done in a well-lit room in front of a full-length mirror. Use a hand-held mirror for areas that are hard to see, such as the backs of your thighs.

All areas should be examined, including your palms and soles, scalp, ears, nails, and your back. Friends and family members can also help you with these exams, especially for those hard-to-see areas, such as your scalp and back.

To learn more, see How to Do a Skin Self-Exam¹.

Be sure to show your doctor any areas that concern you and ask your doctor to look at areas that may be hard for you to see.

Any spots on the skin that are new or changing in size, shape, or color should be checked by a doctor. Any unusual sore, lump, blemish, marking, or change in the way an area of the skin looks or feels may be a sign of skin cancer or a warning that it might occur. The area might become red, swollen, scaly, crusty or begin oozing or bleeding. It may feel itchy, tender, or painful.

Basal cell and squamous cell skin cancers can look like a variety of marks on the skin. The key warning signs are a new growth, a spot or bump that's getting larger over time, or a sore that doesn't heal within a few weeks. (See Signs and Symptoms of Basal and Squamous Cell Skin Cancer for a more detailed description of what to look for.)

Exam by a health care professional

Some doctors and other health care professionals do skin exams as part of routine health check-ups.

Hyperlinks

- 1. www.cancer.org/healthy/be-safe-in-sun/skin-exams.html
- 2. <u>www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/causes-risks-prevention/risk-factors.html</u>

References

Christensen SR, Wilson LD, Leffell DJ. Chapter 90: Cancer of the Skin. In: DeVita VT, Lawrence TS, Rosenberg SA, eds. *DeVita, Hellman, and Rosenberg's Cancer: Principles and Practice of Oncology.* 11th ed. Philadelphia, Pa: Lippincott Williams & Wilkins; 2019.

Xu YG, Aylward JL, Swanson AM, et al. Chapter 67: Nonmelanoma Skin Cancers. In: Niederhuber JE, Armitage JO, Doroshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 6th ed. Philadelphia, Pa: Elsevier; 2020.

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Signs and Symptoms of Basal and Squamous Cell Skin Cancers

Skin cancers often don't cause bothersome symptoms until they have grown quite large. Then they may itch, bleed, or even hurt. But typically they can be seen or felt long before they reach this point.

Basal cell carcinomas

Basal cell cancers usually develop on areas exposed to the sun, especially the face, head, and neck, but they can occur anywhere on the body.

These cancers can appear as:

- Flat, firm, pale or yellow areas, similar to a scar
- Raised reddish patches that might be itchy
- Small, pink or red, translucent, shiny, pearly bumps, which might have blue, brown, or black areas
- Pink growths with raised edges and a lower area in their center, which might contain abnormal blood vessels spreading out like the spokes of a wheel
- Open sores (which may have oozing or crusted areas) that don't heal, or that heal and then come back

Basal cell cancers are often fragile and might bleed after shaving or after a minor injury. Sometimes people go to the doctor because they have a sore or a cut from shaving that just won't heal, which turns out to be a basal cell cancer. A simple rule of thumb is that most shaving cuts heal within a week or so.

Squamous cell carcinomas

Squamous cell cancers tend to occur on sun-exposed areas of the body such as the face, ear, neck, lip, and back of the hands. Less often, they form in the skin of the genital area. They can also develop in scars or skin sores elsewhere.

These cancers can appear as:

- Rough or scaly red patches, which might crust or bleed
- Raised growths or lumps, sometimes with a lower area in the center
- Open sores (which may have oozing or crusted areas) that don't heal, or that heal and then come back
- Wart-like growths

Both basal and squamous cell skin cancers can also develop as a flat area showing only slight changes from normal skin. To see some examples of basal and squamous cell cancers, visit our Skin Cancer Image Gallery¹.

These and other types of skin cancers can also look different from the descriptions above. This is why it's important to have a doctor check any new or changing skin growths, sores that don't heal, or other areas that concern you.

Hyperlinks

1. www.cancer.org/cancer/skin-cancer/skin-cancer-image-gallery.html

References

Christensen SR, Wilson LD, Leffell DJ. Chapter 90: Cancer of the Skin. In: DeVita VT, Lawrence TS, Rosenberg SA, eds. *DeVita, Hellman, and Rosenberg's Cancer: Principles and Practice of Oncology.* 11th ed. Philadelphia, Pa: Lippincott Williams & Wilkins; 2019.

Xu YG, Aylward JL, Swanson AM, et al. Chapter 67: Nonmelanoma Skin Cancers. In: Niederhuber JE, Armitage JO, Doroshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 6th ed. Philadelphia, Pa: Elsevier; 2020.

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Tests for Basal and Squamous Cell Skin Cancers

Most skin cancers are brought to a doctor's attention because of signs or symptoms a person is having.

If you have an abnormal area that might be skin cancer, your doctor will examine it and might do tests to find out if it is cancer or some other skin condition. If it is cancer and there is a chance it might have spread to other areas of the body, other tests might be done as well.

Medical history and physical exam

Usually the first step is for your doctor to ask about your symptoms, such as when the mark first appeared on the skin, if it has changed in size or appearance, and if it has been painful, itchy, or bleeding. You might also be asked about your <u>risk factors for skin cancer</u>¹ (including sunburns and tanning practices), if you or anyone in your family has had skin cancer, and if you have any other skin conditions.

During the physical exam, the doctor will note the size, shape, color, and texture of the area(s) in question, and whether it is bleeding, oozing, or crusting. The rest of your body may be checked for moles and other spots that could be related to skin cancer (or other skin conditions).

The doctor may also feel the nearby lymph nodes, which are bean-sized collections of immune system cells under the skin in certain areas. Some skin cancers can spread to lymph nodes. When this happens, the lymph nodes might be felt as lumps under the skin.

If you are being seen by your primary doctor and skin cancer is suspected, you may be referred to a **dermatologist** (a doctor who specializes in skin diseases), who will look at the area more closely.

Along with a standard physical exam, some dermatologists use a technique called dermoscopy (also known as dermatoscopy, epiluminescence microscopy [ELM] or surface microscopy) to see spots on the skin more clearly. The doctor uses a dermatoscope, which is a special magnifying lens and light source held near the skin. Sometimes a thin layer of alcohol or oil is used with this instrument. The doctor may take a digital photo of the spot.

Skin biopsy

If the doctor thinks that a suspicious area might be skin cancer, the area (or part of it) will be removed and sent to a lab to be looked at under a microscope. This is called a *skin biopsy*. If the biopsy removes the entire tumor, it's often enough to cure basal and squamous cell skin cancers without further treatment.

There are different types of skin biopsies. The doctor will choose one based on the suspected type of skin cancer, where it is on your body, its size, and other factors. Any biopsy will probably leave at least a small scar. Different methods can result in different scars, so if this is a concern, ask your doctor about possible scarring before the biopsy is done.

Skin biopsies are done using a local anesthetic (numbing medicine), which is injected

into the area with a very small needle. You will probably feel a small prick and a little stinging as the medicine is injected, but you should not feel any pain during the biopsy.

(For animated views of some of these procedures, see <u>Skin Biopsy and Treatment Procedures</u>².)

Shave (tangential) biopsy

For a <u>shave biopsy</u>³, the doctor shaves off the top layers of the skin with a small surgical blade. Bleeding from the biopsy site is then stopped by applying an ointment or a chemical that stops bleeding, or by using a small electrical current to cauterize the wound.

Punch biopsy

For a <u>punch biopsy</u>⁴, the doctor uses a tool that looks like a tiny round cookie cutter to remove a deeper sample of skin. The doctor rotates the punch biopsy tool on the skin until it cuts through all the layers of the skin. The sample is removed and the edges of the biopsy site are often stitched together.

Excisional and incisional biopsies

To examine a tumor that may have grown into deeper layers of the skin, the doctor may use an excisional⁵ (or less often, an incisional) biopsy.

- An **excisional biopsy** removes the entire tumor.
- An **incisional biopsy** removes only a portion of the tumor.

For these types of biopsies, a surgical knife is used to cut through the full thickness of skin. A wedge or sliver of skin is removed for examination, and the edges of the wound are usually stitched together.

Examining the biopsy samples

All skin biopsy samples are sent to a lab, where they are looked at with a microscope by a doctor called a **pathologist**. Often, the samples are sent to a **dermatopathologist**, a doctor who has special training in looking at skin samples.

Lymph node biopsy

It isn't common for a basal or squamous cell cancer to spread beyond the skin, but if it does it usually goes first to nearby lymph nodes, which are bean-sized collections of immune cells. If your doctor feels lymph nodes under the skin near the tumor that are too large or too firm, a lymph node biopsy may be done to find out if cancer has spread to them.

Fine needle aspiration (FNA) biopsy

For an FNA biopsy, the doctor uses a syringe with a thin, hollow needle to remove very small fragments of the lymph node. The needle is smaller than the needle used for a blood test. A local anesthetic is sometimes used to numb the area first. This test rarely causes much discomfort and does not leave a scar.

FNA biopsies are not as invasive as some other types of biopsies, but they may not always provide a large enough sample to find cancer cells.

Surgical (excisional) lymph node biopsy

If an FNA doesn't find cancer in a lymph node but the doctor still suspects the cancer has spread there, the lymph node may be removed by surgery and examined. If the lymph node is just under the skin, this can often be done in a doctor's office or outpatient surgical center using local anesthesia. This will leave a small scar.

Imaging tests

Spread of the cancer deeply below the skin or to other parts of the body is uncommon for squamous cell cancers and rare for basal cell cancers, so most people with one of these skin cancers don't need imaging tests. But if your doctor thinks you might be at risk for the cancer spreading outside the skin, imaging tests such as MRI⁶ or CT scans⁷ of the area might be done.

Hyperlinks

- 1. <u>www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/causes-risks-prevention/risk-factors.html</u>
- 2. www.cancer.org/cancer/skin-cancer/skin-biopsy-treatment-procedures.html
- 3. <u>www.cancer.org/cancer/skin-cancer/skin-biopsy-treatment-procedures/shave-biopsy.html</u>
- 4. <u>www.cancer.org/cancer/skin-cancer/skin-biopsy-treatment-procedures/punch-biopsy.html</u>

- 5. <u>www.cancer.org/cancer/skin-cancer/skin-biopsy-treatment-procedures/standard-local-excision.html</u>
- 6. www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html
- 7. <u>www.cancer.org/treatment/understanding-your-diagnosis/tests/ct-scan-for-cancer.html</u>

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Basal and Squamous Cell Skin Cancer Stages

After someone is diagnosed with cancer, doctors will try to figure out if it has spread, and if so, how far. This process is called **staging**. The stage of a cancer describes how much cancer is in the body. It helps determine how serious the cancer is and how best to treat it.

The stage is based on the results of the physical exam, the skin biopsy (and any other biopsies), and the results of imaging tests if they are done. These exams and tests are described in Tests for Basal and Squamous Cell Skin Cancers.

Determining the stage of **basal cell skin cancers** is rarely needed, because these cancers are almost always cured before they spread to other parts of the body.

Squamous cell skin cancers are more likely to spread (although this risk is still small), so determining the stage can be more important, particularly in people who are at higher risk. This includes people with weakened immune systems, such as those who have had organ transplants and people infected with HIV, the virus that causes AIDS. Most squamous cell skin cancers occur in the head and neck region and tend to have a higher risk of recurring (coming back) or spreading compared to those in other locations.

How is the stage determined?

The system most often used to stage basal and squamous cell skin cancers is the American Joint Commission on Cancer (AJCC) **TNM system**. The most recent version, effective as of 2018, <u>applies only to squamous and basal cell skin cancers of the head and neck area</u> (lip, ear, face, scalp and neck). The stage is based on 3 key pieces of information:

- The size of the tumor (T) and if it has grown deeper into nearby structures or tissues, such as a bone
- If the cancer has spread to nearby lymph nodes (N)
- If the cancer has spread (metastasized) to distant parts of the body (M)

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced.

Once a person's T, N, and M categories have been determined, this information is combined in a process called *stage grouping* to assign an overall stage. The earliest stage of skin cancer is stage 0 (also called *carcinoma in situ*, or CIS). The other stages range from I (1) through IV (4). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more.

If your skin cancer is in the head and neck area, talk to your doctor about your specific stage. Cancer staging can be complex, so ask your doctor to explain it to you in a way you understand. For more information, see<u>Cancer Staging</u>¹.

Other factors that can affect outlook and treatment options

The stage of a skin cancer can help give an idea of how serious the cancer is likely to be, including how likely it might be to return after treatment. But other factors are also important to consider. Some of these include:

- The location of the tumor
- How fast the tumor has been growing
- How well-defined the borders of the tumor are
- If the tumor has been causing symptoms, such as pain or itchiness
- How the cancer cells look under a microscope
- If the cancer cells have invaded small nerves or blood vessels in and around the tumor
- If the cancer is in a place that was previously treated with radiation
- If the person has a weakened immune system

Your doctor can explain if any of these factors might affect your treatment or outlook.

Hyperlinks

1. www.cancer.org/treatment/understanding-your-diagnosis/staging.html

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American Joint Committee on Cancer. Cutaneous Squamous Cell Carcinoma of the Head and Neck. In: *AJCC Cancer Staging Manual.* 8th ed. New York, NY: Springer; 2017: 171-181.

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Questions to Ask About Your Basal or Squamous Cell Skin Cancer

It's important to have honest, open discussions with your doctor. Ask any question, no matter how small it might seem. Here are some questions you might want to ask:

When you're told you have skin cancer

- What type of skin cancer¹ do I have?
- Can you explain the different types of skin cancer?
- Has the cancer grown deeply into the skin? Has it spread to other parts of the body?
- Do I need any other tests before we can decide on treatment?
- Do we need to determine the <u>stage</u> of the cancer? Are there any other factors that might affect my treatment options?
- Do I need to see any other doctors?

• If I'm concerned about the costs and insurance coverage for my diagnosis and treatment, who can help me?

When deciding on a treatment plan

- How much experience do you have treating this type of cancer?
- What are my treatment options²? What do you recommend? Why?
- Will I be okay if the cancer is just removed with no other treatment?
- What will treatment be like? Where will it be done?
- What are the risks or side effects from treatment?
- Will I have a scar after treatment? How big will it be?
- How guickly do we need to decide on treatment?
- What should I do to be ready for treatment?

After treatment

- What are the chances of my cancer coming back with the treatment options we have discussed? What will we do if that happens?
- What are my chances of developing another skin cancer?
- Should I take special precautions to avoid the sun? What steps I can take to protect myself?
- What type of <u>follow-up</u>³ will I need after treatment?
- How will we know if the cancer has come back? What should I watch for?
- Are any of my family members at risk for skin cancer? What should I tell them to do?

Along with these sample questions, be sure to write down some of your own. For instance, you might want more information about recovery times so you can plan your work or activity schedule. Or you may want to ask about second opinions⁴ or about clinical trials⁵ for which you may qualify.

Keep in mind that doctors aren't the only ones who can give you information. Other health care professionals, such as nurses and social workers, can answer some of your questions. To find out more about speaking with your health care team, see
The Doctor-Patient Relationship6.

Hyperlinks

- 1. <u>www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/about/what-is-basal-and-squamous-cell.html</u>
- 2. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/treating.html
- 3. <u>www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/after-treatment/follow-up.html</u>
- 4. <u>www.cancer.org/treatment/finding-and-paying-for-treatment/choosing-your-treatment-team/seeking-a-second-opinion.html</u>
- 5. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
- 6. <u>www.cancer.org/treatment/finding-and-paying-for-treatment/choosing-your-treatment-team/the-doctor-patient-relationship.html</u>

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