

## Overview: Skin Cancer - Melanoma

# How Is Melanoma Skin Cancer Found?

Melanoma can often be found early. Everyone can play an important role in finding this cancer early, when it is curable.

### Self Exams

It's important to check your own skin about once a month. You should know the pattern of moles, freckles, and other marks on your skin so that you'll notice any changes. Self-exam is best done in front of a full-length mirror. A hand-held mirror can be used for areas that are hard to see. A family member can check areas such as your lower back or the back of your thighs.

Spots on the skin that change in size, shape, or color should be seen by a doctor right away. 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.

### Exam by a Health Professional

Part of a routine cancer check-up should include a skin exam by a doctor or qualified health professional.

### What to Look For

#### Normal Moles

It's important to know the difference between melanoma and a harmless mole. A normal mole is most often an evenly colored brown, tan, or black spot on the skin. It can be either flat or raised. It can be round or oval. Moles are usually less than 1/4 inch across, or about the width of a pencil eraser. Moles can be present at birth or they can appear later. Several moles can appear at the same time.

Once a mole has developed, it will usually stay the same size, shape, and color for many years. Moles may fade away in older people.

Most people have moles, and almost all moles are harmless. But it is important to notice changes in a mole--such as its size, shape, or color--that suggest a melanoma may be developing.

### Possible Signs and Symptoms of Melanoma

The *ABCD rule* can help you tell a normal mole from an abnormal mole. Moles that have any of these traits should be checked by your doctor. ABCD stands for the following:

- **A**symmetry: One half of the mole does not match the other half.
- **B**order irregularity: The edges of the mole are irregular, ragged, blurred, or notched.
- **C**olor: The color over the mole is not the same all over. There may be shades of tan, brown, or black, and sometimes patches of red, blue, or white.
- **D**iameter: The mole is larger than about ¼ inch--about the size of a pencil eraser--although doctors are now finding more melanomas that are smaller.

Other important signs of melanoma include changes in size, shape, or color of a mole. Some melanomas do not fit the "rules" above, and it may be hard to tell if the mole is normal or not, so you should show your doctor anything that you are unsure of.

## If Cancer Is Suspected

If there is any reason to suspect that you have a melanoma, your doctor will order further exams and tests to find out if it is really a melanoma or something else.

### Exam

The doctor probably will ask about your symptoms and risk factors, including your age, when the mark on the skin first appeared, and whether it has changed in size or the way it looks. You may also be asked about whether anyone in your family has had skin cancer and about past exposure to known causes of skin cancer.

During the exam, the doctor will note the size, shape, color, and texture of the area in question, and whether there is bleeding or scaling. The rest of the body will be checked for other spots and moles. The doctor may also examine lymph nodes in the groin, underarm, or neck areas near the area in question. Enlarged lymph nodes might suggest the spread of a melanoma. You might be referred to a skin doctor (dermatologist).

The doctor might use a special magnifying lens and light source held near the skin. Sometimes a thin layer of oil is used with this instrument. A picture of the spot may be taken. These tests, when used by a doctor who has experience with them, can improve the chances in finding melanomas early. It can also often show that a lesion is not cancer without the need for a biopsy.

### Skin Biopsy

If the doctor thinks you might have a melanoma, he or she will take a sample of the skin to look at under a microscope. This is called a biopsy. Different methods can be used for a skin biopsy. The choice depends on the size of the area in question and where it is found on the body. All methods are likely to leave a scar. Since different methods leave different types of scars, you should ask the doctor about this before the biopsy is done.

The skin around the area of the biopsy will be numbed before the biopsy. You will feel a small needle stick and a little burning with some pressure for less than a minute, but no pain.

**Incisional and excisional biopsies:** If the doctor has to look at a tumor in the deeper layers of the skin, an incisional or excisional biopsy will be done. The skin will be numbed before the biopsy. A surgical knife is used to cut through the full thickness of skin. A wedge of skin is removed, and the edges of the wound are sewn together. An incisional biopsy removes only a portion of the tumor. If the entire tumor is removed, it is called an excisional biopsy. Excisional biopsy is the method most often used.

**Shave biopsy:** After numbing the area, the doctor "shaves" off the top layers of the skin. A shave biopsy is useful for many types of skin diseases and in treating benign moles. But it is not often used if a melanoma is suspected because the sample may not be thick enough to find out how deeply the cancer goes into the tissues.

**Punch biopsy:** In a punch biopsy a deeper sample of skin is removed. The doctor uses a tool that looks like a tiny round cookie cutter. Once the skin is numbed, the doctor rotates the tool on the surface of the skin until it cuts through all the layers of the skin and takes out a sample of tissue.

After a biopsy, the skin sample is sent to a lab to be looked at under a microscope. The sample may also be sent to a doctor with special training in diagnosing from skin samples (a dermatopathologist).

## Biopsies of Melanoma That Has Spread

Rarely, some melanomas spread so quickly that a person could have a lot of cancer in the lymph nodes, lungs, brain, or other places while the original skin melanoma is still small. Melanoma that has spread to other parts of the body may not be found until long after the first melanoma was removed from the skin.

When this happens, melanoma in those organs might be confused with a cancer starting in that organ. For example, melanoma that has spread to the lung might be confused with a cancer that starts in the lung. There are special tests that can be done on biopsy samples to tell whether it is a melanoma or some other kind of cancer. This is important because different treatments are used for different cancers.

## Finding Metastases

**Fine needle aspiration biopsy (FNA):** This approach can sometimes be used if the doctor suspects the melanoma has spread to organs such as the lung or liver. A thin needle is used to remove very small tissue samples from a tumor. The test rarely causes much discomfort and does not leave a scar. The FNA is not used to diagnose a suspicious mole, but it may be used to biopsy large lymph nodes near a melanoma to find out if it has spread.

**Surgical (excisional) lymph node biopsy:** This method involves removing an abnormally large lymph node through a small incision. It is often done if a lymph node's size suggests spread of melanoma but FNA did not find any cancer cells.

**Sentinel lymph node biopsy:** This has become a common method for finding out if the cancer has spread to lymph nodes. A surgeon injects a radioactive substance into the area of the melanoma. Within an hour, lymph nodes are checked for radioactivity to find which ones are the first to drain fluid from the skin near the melanoma. Then the lesion is injected with a blue dye that will travel to the nodes that the cancer would first drain into. These are the sentinel lymph nodes, called that because they "stand watch," so to speak, over the tumor. When these lymph nodes have been found, they are removed and looked at under a microscope. If cancer cells are found, the rest of the lymph nodes in this area are removed, too. If the sentinel nodes do not contain cancer cells, further lymph node surgery might not be needed.

## Imaging Tests

Imaging tests are done to produce pictures of the inside of the body. They are used to look for the spread of melanoma. They are not needed for people with very early melanoma which is not likely to have spread.

**Chest X-rays:** This test may be done to see if the cancer has spread to the lungs.

**CT (computed tomography) scans:** If there is any reason to suspect that the melanoma has spread to the liver or other organs, the doctor might order CT scans. These scans use many x-ray images that are combined by a computer to give a detailed, cross-sectional view of the body. CT scans take longer than regular x-rays and you usually need to lie still on a table while they are being done. You might feel a bit confined by the ring you have to lie in when the pictures are being taken.

**MRI (magnetic resonance imaging):** Like a CT scan except that it uses radio waves and strong magnets to produce an image. MRI scans are very helpful in looking at the brain and spinal cord. MRI scans take longer than CT scans--often up to an hour. You may have to lie inside a narrow tube, which is confining and can upset some people. Newer, "open" MRI machines can help with this if needed. The MRI machine makes loud buzzing and thumping noises that may bother some people. Some places provide headphones to block this out.

**PET (positron emission tomography) scans:** In this test, a special kind of radioactive sugar is injected into the patient's vein. The sugar collects in areas that have cancer and a scanner can spot these areas. This test is useful when the doctor thinks the cancer has spread but doesn't know where. Doctors find it most useful in people with advanced stages (see below) of melanoma. It is not very helpful in people with early stage melanoma.

**Nuclear bone scans:** A bone scan is used to look for cancer that has spread to the bones and is rarely used for melanoma. In this test a radioactive chemical is injected into a vein. The substance collects in the bones where the cancer has spread. These areas may be biopsied to see if they contain melanoma.

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[http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_2\\_3X\\_How\\_is\\_melanoma\\_skin\\_cancer\\_found\\_50.asp?sitearea=CRI&viewmode=print&](http://www.cancer.org/docroot/CRI/content/CRI_2_2_3X_How_is_melanoma_skin_cancer_found_50.asp?sitearea=CRI&viewmode=print&)