Melanoma is a type of skin cancer. It starts in the melanocytes, which are the cells that give your skin its color.

**Risk Factors for Melanoma**

We don’t know exactly what causes melanoma, but we do know some of the risk factors for it. These include:

- Spending a lot of time in the sun.
- Using tanning lamps and booths.
- Having moles.
- Having fair skin.
- Having blond or red hair.
- Having family members with the disease.

**Warning Signs of Melanoma**

**ABCDEs of melanoma**

Warning signs of melanoma are often called the “ABCDEs” of
melanoma. Look for the following warning signs on any moles or spots on your skin:

**A - Asymmetry:** One half of the mole doesn’t look like the other half.

**B - Border:** The borders (edges) of the mole are uneven and irregular.

**C - Color:** The mole is more than one color. Different shades of brown, tan, red, or black could appear.

**D - Diameter:** The mole is bigger than 6 millimeters, which is about the size of a pencil eraser.

**E - Evolution:** The mole is changing in any way. This includes a change in size, shape, texture, color, or surface (such as bleeding) or any new symptoms, such as itching or tenderness.

**Ugly duckling mole**

Another warning sign of melanoma is called the “ugly duckling mole.” This is a mole or spot on your skin that looks or feels different than similar ones on your body.

**Diagnosis of Melanoma**

If your doctor thinks that you may have melanoma, he or she will do a biopsy of the mole to take a sample of tissue. One type of biopsy is called a punch biopsy, which uses an instrument that takes a core of tissue. Another type of biopsy is called an incisional biopsy, which involves a small cut in the skin. Both
are usually done in your doctor’s office.

With both biopsy types, your doctor will remove tissue from the suspicious area. The tissue will be examined under a microscope. This will tell your doctor if it is cancer or not.

If the biopsy shows cancer cells, you may need more tests. These may include a chest x-ray, a computed tomography (CT) scan, magnetic resonance imaging (MRI), or a positron emission tomography (PET) scan. These tests are done to see if the melanoma has spread to other areas of your body. If the tests show that the melanoma may have spread, you will have lymphatic mapping and a sentinel node biopsy. See the “Surgical Removal of Melanomas” section for more information.

**Fine needle aspiration**

If your doctor can feel the lymph node(s), he or she may do a fine needle aspiration. This can be done in your doctor’s office. During a fine needle aspiration, a needle is inserted into your lymph node and tissue or fluid is taken out. This fluid or tissue is examined for cancer cells. If there are cancer cells, the lymph nodes around the tumor will be removed, which will take place during your surgery. You may need to have the surgery even if cancer cells are not present. This is because the needle withdraws tissue or fluid only from the area where it was inserted.

**Types of Melanoma**
There are several types of melanoma that affect the head and neck. The most common type is superficial spreading melanoma. This type of melanoma grows along the top layer of the skin for some time before spreading more deeply. About 40% to 60% of melanoma tumors are this type. It can occur anywhere on the body. Your doctor will discuss the type of melanoma that you have with you.

**Treatment**

Your doctor will discuss your treatment options with you. This resource discusses surgical treatment of melanomas, but all treatment options are based on:

- How thick the tumor is.
- Whether it is in your lymph nodes.
- If it has metastasized (spread) to distant sites such as your lungs or liver.

**Surgical removal of melanomas**

Superficial melanoma can be removed with a surgery called a wide excision. This can be done with local anesthesia (medication that makes you numb), but is usually done as a surgery under general anesthesia (medication that makes you sleepy). If you are having surgery, your nurse will give you the resource *Getting Ready for Surgery* to help prepare you for it.

In a wide excision, your doctor will remove the melanoma and some healthy skin around it to make sure all of the cancer was
removed. This tissue will be sent to the pathologist to determine the type of tumor that you have. The surgical site will be closed with sutures (stitches) which are removed about a week after your surgery or with sutures that dissolve on their own. Some people may also have reconstruction, depending on how big the wound is. See the “Reconstruction of your wound site” section for more information.

**Lymphatic mapping and sentinel node biopsy**

You may need to have a sentinel node biopsy during your surgery. A sentinel node is the first lymph node(s) to which cancer cells are most likely to spread from a primary tumor.

Lymphatic mapping is the first step in a sentinel node biopsy. During lymphatic mapping a dye is injected into your body that travels to the lymph nodes nearby. Lymphatic mapping takes place in the Nuclear Medicine Department before your wide excision surgery. If you are having lymphatic mapping, your nurse will give you a resource called *Lymphatic Mapping with Sentinel Node Biopsy*.

Your doctor will remove the sentinel node in a sentinel lymph node biopsy, which will take place at the same time as your wide excision surgery.

- If the sentinel node does not have cancer, it is unlikely that any other nodes have cancer.
- If the sentinel node does have cancer, more lymph nodes will be removed. This is called a lymph node dissection.
Reconstruction of your wound site

After the melanoma is removed, you may need to have reconstruction on your wound site. Your surgeon will speak with you about what type of reconstruction is right for you, before your surgery. You may have both a head and neck surgeon and a plastic surgeon as part of your surgical team.

Types of reconstruction

- In a skin graft, your surgeon removes a thin layer of skin from one part of your body (called the donor site) and uses it to close the surgical site that needs to be covered (called the recipient site). Common donor sites are the upper thigh. If you are having a skin graft, your doctor or nurse will give you a resource called *The Split-Thickness Skin Graft*.

- In a local flap, your surgeon takes tissue from one part of your body (donor site) and moves it to the surgical site that needs to be covered (reconstruction site). The tissue that is used remains attached to the body, bringing its own blood supply. The other end of the flap is separated from the original site. This end is turned to cover the surgical site. If you are having local flap reconstruction, you doctor or nurse will give you a resource called *Closure or Reconstruction Using a Local Flap: A Guide to Care*.

- In a free flap, your surgeon will remove the tumor, bone, and soft tissue, as needed. Your reconstructive surgeon will take a free flap (block of tissue) from the donor site and will attach it at to the recipient site. He or she will use a
microscope to see and connect the tiny blood vessels in the free flap with the blood vessels at the recipient site. If you are having free flap reconstruction, you doctor or nurse will give you a resource called *Reconstruction Using Free Tissue Transfer and Microvascular Surgery: A Guide to Care*.

**After your surgery**

Your healthcare provider will speak with you about what to expect after your surgery and provide more resources. If you had a lymph node dissection, you may have a drain to remove extra fluid for 3 to 4 days.

When you come in for your post-surgery appointment, your surgeon will discuss your final pathology report from your surgery with you. He or she will let you know if you need more treatment and other follow-up information.

**Support Resources**

Any cancer diagnosis can cause worry and anxiety. You may find that you are more anxious just before follow-up visits and tests. Support groups can be very helpful after treatment ends. Our Resources for Life After Cancer (RLAC) Program runs support groups for people with head and neck cancer. The American Cancer Society also has in-person and online support groups that you can join. We also have other professional staff that you can see, including psychiatrists, psychologists, and social workers. Ask your doctor or nurse for a referral.
If you have any questions, contact a member of your healthcare team. After 5:00 PM, during the weekend, and on holidays, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.