

Skin cancer is the most common type of cancer, with more than one million cases diagnosed each year. The two most common types of skin cancer are basal cell carcinoma and squamous cell carcinoma.

These cancers first develop in the top layers of the skin and slowly enlarge, spreading along the skin surface and down into deeper layers in the skin.

Skin cancer has a structure with roots similar to that of a tree. Often, what you and your doctor see is only the “tip of the iceberg.” The “roots” of the cancer can be extensive and only seen with a microscope.

To cure skin cancer, the root system must be completely removed. If it is not, the cancer can continue to grow.

The Mohs micrographic surgery technique

Mohs micrographic surgery was developed by Dr. Frederic Mohs in the 1930s.

The technique involves removing the skin cancer in thin layers and examining the tissue under a microscope to check for cancer. This process is repeated until the microscopic exam reveals clear margins, which means there are no cancer cells at the edge of the tissue that was removed.

Mohs micrographic surgery provides the highest cure rate (98 to 99 percent) of all methods used to remove skin cancers, while also removing a minimal amount of normal skin. It is useful for removing tumors that:

- Are large
- Have infiltrative growth patterns (root-like extensions that spread into surrounding tissue)
- Are recurrent (returning)

- Are in hard-to-treat or cosmetically important areas

For an informational video on Mohs surgery, visit www.mohscollege.org or www.skincancermohssurgery.org

Preparing for surgery

Prior to surgery, a nurse will contact you to ask you some routine health history questions, such as what medications you are taking and if you have any allergies to medications. The nurse will also answer any questions you may have.

If possible, avoid anti-inflammatory medications (ibuprofen and naproxen), such as Advil, Aleve or Motrin, for 7 days before surgery. Do not drink alcohol for 24 hours before surgery.

The day of surgery

Eat a regular breakfast on the morning of your surgery, and take all of your daily medications as you normally would, unless your clinician tells you otherwise. Bring a list of your medications with you to the surgery. Dress comfortably, and do not wear makeup in the area of the surgery site.

You can drive yourself to your appointment, though you may want to have someone come with you, so that you do not have to worry about driving home. If your skin cancer is near one of your eyes, plan to have someone else drive you in case there is swelling around your eye or you need to wear a patch.

You may want to bring a book, magazine or handicraft project with you, as there is some waiting during the procedure. You also may want to bring a snack or lunch to eat while you are waiting, as some procedures extend into the afternoon. There is a café on the second floor of the clinic for your convenience.

During the surgery

The surgery is done in a surgical room at the clinic. Surgery will continue until a cancer-free layer of skin is uncovered. The entire procedure could take several hours, depending on the size and depth of your cancer.

The area around your skin cancer will be numbed using a local anesthetic. Once the area is numbed, the first layer of skin will be removed.

A dressing will be applied to the area, and you will return to the reception room.

The removed tissue will be carefully mapped and inked by your clinician and sent to the lab in the clinic. In the lab, a laboratory technician will prepare microscopic slides.

The process of preparing the slides takes about an hour. Once the slides are prepared, your surgeon will read the slides under the microscope and determine if there is still any tumor remaining. Most Mohs surgery cases require 2 to 4 stages. Each stage requires removing a layer of skin and preparing slides.

When your skin cancer has fully been removed and clear margins are seen, a decision is made on the best method for closing the wound. Methods include closing side-to-side with stitches, a skin flap or a skin graft. Some also may be left open to heal naturally. The best method is determined on an individual basis.

After surgery

What to expect

The area surrounding the operative site may be numb. This is not uncommon and can last for many months. In rare cases, the feeling may never fully return to normal. You also may experience some skin tightness across the area of surgery. This is normal and will improve with time as healing progresses.

Skin heals itself by producing a scar; therefore, scar-free cancer treatment surgery is not possible. The method used to repair your wound will be selected to minimize your scarring while still providing the best outcome. Careful wound care following your surgery will help reduce scarring.

Try to avoid making travel plans for the week following your surgery in case you need to see your clinician.

Wound care

The care of your surgical site depends on the location and the type of closure that was used. You will receive written instructions as well as an explanation from your clinician. The instructions also will contain phone numbers to call if you have any questions or concerns after your surgery.

Watch for signs of infection, which may include redness, swelling, increasing pain or pus. By following the wound care instructions carefully, you will reduce the chance of getting an infection. If you have any signs of infection, call your clinician’s office immediately.

Medications

Most patients have very little pain after surgery. Use extra strength acetaminophen (Tylenol) as needed to control your pain.

Your clinician also may prescribe other pain or antibiotic medications as he or she sees fit.

Follow-up

You will be asked to return to the clinic 1 to 2 weeks after surgery. Your skin will be checked to make sure it is healing well. If you have stitches, they will be removed. Further surgical follow-up is usually not necessary and will be determined on an individual basis. Your primary care doctor should

examine you every 6 to 12 months to check for possible new skin cancer development.

Frequently asked questions

Why is there such a big surgical wound for what looked like such a small cancer spot?

What you saw on the top layer of your skin was only the “tip of the iceberg.” Often, the cancer extends much farther underneath the skin surface with roots that can only be seen by a microscope.

Will there be a scar?

Unfortunately, there is no such thing as “scarless surgery.” Fortunately, Mohs surgery fully removes the cancer with the smallest possible wound, which creates the best possible appearance.

Why do I have so many stitches?

Mohs surgery usually leaves a round wound after the cancer is removed. Simply stitching this circle would leave unsightly puckering of your skin. To fill in this area, new skin must be taken from other areas to fill the hole. This requires more extensive stitching.

There is some dried red blood on my bandage. Is this normal?

A small amount of oozing in the early postoperative period is completely normal. If you have bleeding that fully saturates the bandage placed by your clinician, apply direct pressure of another gauze pad over the surgical site for a full 10 minutes. If this fails to stop the bleeding, contact us at the numbers on your wound care instruction sheet.

Should I expect any bruising?

Bruising around the surgical site is not uncommon, especially in patients who take blood thinners such as aspirin and warfarin (Coumadin). This bruising normally goes away in 7 to 10 days.

How long will I be at the clinic on the day of surgery?

Plan to spend at least several hours at the clinic for the surgery and slide preparation time. On rare occasions, the entire process may last most of the day.

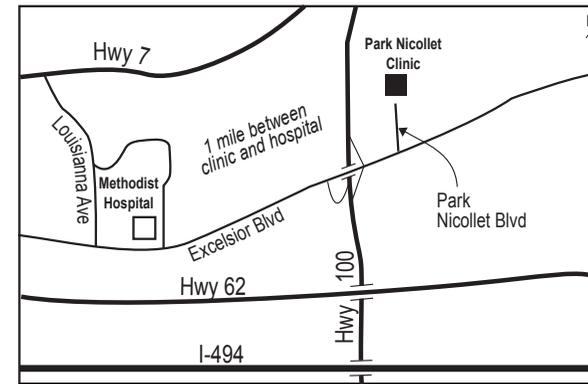
Patient checklist

- Eat a good breakfast the morning of surgery.
- Take all of your regular medications the day of surgery unless otherwise instructed. Please also bring a list of your medications with you.
- Dress comfortably.
- Avoid anti-inflammatory medications such as Advil, Aleve or Motrin, if possible, for 7 days before surgery.
- Notify us if your doctor recommends that you take antibiotics prior to dental procedures.
- Bring something to read or pass the time.
- Do not drink alcohol 24 hours before or 48 hours after the surgery.
- Do not wear makeup in the area of the surgical site.

Directions

Park Nicollet Clinic—St. Louis Park
Mohs Surgery Center
3800 Park Nicollet Blvd., Fourth Floor
St. Louis Park, MN 55416
952-993-3987

Hwy. 100 to Excelsior Blvd.; east to Park Nicollet Blvd. (across from Miracle Mile shopping center). Turn left into clinic and follow signs, going straight and then left, to parking ramp. Parking is free.



Mohs Micrographic Surgery

Your appointment is scheduled with:

- Dane R. Christensen, MD
- Theresa Ray, MD
- Robyn Wetter, MD

Park Nicollet Clinic—St. Louis Park
3800 Park Nicollet Blvd., Fourth Floor
St. Louis Park, MN 55416
952-993-3987

Day _____ Date _____ a.m./p.m.

*This isn't just about health care.
This is about you.*

