

Patient Education

Center for Dermatologic Surgery and Cutaneous Oncology

Team | Specialties | Contact Information

<u>Team</u>	<u>Specialties</u>	<u>Location and Contact Information*</u>
Mary E. Maloney, MD Director Dori Goldberg, MD Amanda Auerbach, MD Bassel Mahmoud, MD, PhD Mark J. Scharf, MD Riley Mclean-Mandell, MD Julia Baltz, MD Kaitlin Blankenship, MD, Fellow-Mohs Surgery Shelly Weedon, PA-C Lindsey Jolley, PA-C Monica Vargas, NP	Mohs Micrographic Surgery Dermatologic Surgery Melanoma Pigmented Lesions Cutaneous Oncology Laser Surgery Cosmetic Dermatology	Dermatology <input type="checkbox"/> UMass Memorial Medical Center Hahnemann Campus 281 Lincoln Street, Worcester, MA 01605 Tel: 508-334-5962 Fax: 508-334-5821 <input type="checkbox"/> UMass Memorial HealthAlliance-Clinton Hospital Leominster Campus 60 Hospital Road, Leominster, MA 01453 Tel: 978-798-3421 Fax: 978-798-3430

**Please call the clinic selected with any questions.*

This document provides a brief explanation of **Mohs surgery**, what to expect on the day of your visit, and how to prepare for your surgery (see our *checklist at the end of the document*). If you have any questions after reviewing this information, please feel free to contact us to schedule an in-person consultation with your surgeon.

What is Mohs micrographic surgery?

Mohs surgery is the most effective method for treating both the common forms of skin cancer, like basal and squamous cell carcinoma, as well as less common cancers. It has a very high cure rate of up to 96-99%, even when other forms of treatment have failed. Mohs surgery is named in honor of Dr. Frederick Mohs, who developed the technique in the 1940s. The surgery is performed under local anesthesia in our outpatient clinic by our Mohs surgeons along with our Mohs fellow.

There are three main parts to the procedure. First, your surgeon will surgically remove the tumor. Second, the tumor is processed in our lab and the margins are evaluated. If there is any tumor left, an additional "stage" or sample is taken only where the tumor remains and the margins are checked again. By repeating this process in "stages," your Mohs surgeon can trace out the tumor and remove all areas of skin cancer while preserving as much healthy skin as possible. This ensures that no cancer is left behind. Third, once the tumor is removed, your Mohs surgeon will repair your skin with as little mark or scar as possible. The entire surgery can take anywhere from two to four hours or more.

What does the surgery involve?

The Mohs surgery team taking care of you will consist of your Mohs surgeon, assisted by our Mohs fellow (a dermatologist who is in fellowship training for Mohs surgery), our physician assistant or nurse practitioner, a surgical nurse, a medical assistant, and a histotechnologist (who will process the tissue and take photographs for your medical record). A dermatology resident may also be part of the team. Mohs surgery is performed in "stages" with about 20 to 40 minutes of wait time between each stage.

Getting Checked In

You will be brought into the surgery room where your blood pressure, pulse and medical history are checked and photographs taken. We will review the Mohs procedure with you, answer your questions, and have you sign an informed consent for surgery.

Members of our PFAC are routinely asked to review select educational materials to ensure patient-centered language etc.

Taking the First Stage

The area is cleaned with an antiseptic solution and a local anesthetic, called lidocaine, is injected to numb the area. The local anesthetic is the only part of the surgery that is uncomfortable. You will notice a stinging or burning sensation that lasts for a few seconds.

Once the area is numb, the tumor is removed with a thin rim of surrounding skin. The small amount of bleeding is stopped with a cautery device that seals off little blood vessels. A temporary dressing is applied while you wait for the tissue processing. If a friend or relative has accompanied you, they can now return to the room to keep you company.

The skin removed is divided into pieces and carefully mapped to keep track of orientation, like on a clock face. By doing this, we are able to pinpoint the exact location of any remaining tumor detected during microscopic examination. The preparation and review of your slides takes approximately 20 to 40 minutes.

Additional Stages

If more cancer is found, the area is cleaned again and additional anesthetic is injected to ensure your comfort. A second stage of Mohs surgery is performed, removing only tissue at the area with remaining cancer. The average tumor requires two to four stages for removal. Some require a single stage and rarely more than four stages. Do not be discouraged if your cancer is not removed in one stage. We are tracing the extent of the tumor very carefully, thereby removing as little normal tissue as possible. Only by removing small layers in stages can this be accomplished.

Repairing the Area: What happens after the cancer is removed?

After the cancer is removed, the wound will be repaired. The reconstruction and healing of the wound is a key component of Mohs surgery. Your Mohs surgeon has special training in facial reconstruction. The method chosen to repair your wound will depend on its size, shape and location. Your Mohs surgeon will discuss the repair options with you, with attention to providing the best functional and cosmetic result.

Most often, the area will be repaired on the day of surgery using stitches. In some cases, a skin graft (skin borrowed from another area) or skin flap (skin moved into the wound from a neighboring site) will be used to provide the best result. Sometimes the wound is allowed to heal without stitches if this option will provide equal or better results. Once the area is repaired, you will go home with a large, bulky bandage ("pressure dressing") that will remain in place for 24-48 hours. This helps reduce the risks of bleeding and infection.

Frequently Asked Questions

How long does the surgery take?

You arrive for a morning or afternoon session and will generally be in the clinic for 2 to 4 hours, depending on how many stages are required.

Am I awake?

Mohs surgery is performed under local anesthesia while you are awake. In between stages, you will have a temporary bandage on and you can sit up, talk, read, and get to the bathroom.

How do I prepare for surgery?

Medications

- ❖ **DO NOT STOP ANY OF YOUR MEDICATIONS PRIOR TO SURGERY UNLESS INSTRUCTED.**
- ❖ Please let us know if you take any of the following blood thinning products (but do not stop any of these medications unless instructed to do so): aspirin, coumadin (warfarin), plavix (clopidogrel), vitamin E, fish oil.
- ❖ If your doctor routinely checks your INR level, please call us with this information prior to the surgery.

Alcohol

Three days before AND at least 1 day after surgery, we ask that you avoid drinking alcohol as it may increase your risk of bleeding.

Breakfast, Companions, Make-up and Books

Eat your normal breakfast or lunch (unless specifically instructed otherwise by a physician). It's helpful to have someone with you to keep you company between stages. Also, you will have a bulky bandage on afterwards, and it is preferable to have someone else drive you home.

On the day of surgery, please do not apply any makeup or moisturizers. Because you will be with us for several hours, you and your companion may want to bring along a light snack and reading material or another quiet activity as there is waiting between stages.

Will I have a scar?

There is *always* a scar after surgery. Your Mohs surgeon makes all efforts to hide the scar in the natural contours of your face and to preserve the shape and function of sensitive areas such as the nose and lips. Scars improve over weeks to months as scar tissue remodels, so it is important to give the scar time to "mature." Sometimes a second procedure may be needed to modify or smooth the scar. We will work with you to give you the most invisible scar possible. Our goal is for both you and your Mohs surgeon to be happy with your result.

What can I expect after surgery?

Discomfort

After the anesthetic wears off, there may be some soreness or aching. This usually improves within 24 hours and usually there is surprisingly little pain. Rest, icing the area and Tylenol are usually sufficient to relieve any discomfort. Occasionally, stronger pain medication may be prescribed. Please avoid ibuprofen (Advil, Motrin, Aleve) for the first 3 days as it may increase the risk of bleeding.

Activities

In general, we recommend that you limit your activities for 7-14 days after the surgery. Your surgery team will give you specific recommendations on how your wound was repaired. Activities such as bending, heavy lifting, and strenuous exercise should be avoided as they can elevate your blood pressure and lead to bleeding, swelling or opening up of the stitches. Please defer airplane travel for at least one to two weeks after your surgery as the rigors of travel may adversely affect healing.

Alcohol should be avoided for 3 days following surgery as it dilates the blood vessels and could lead to bleeding problems in the wound.

What's normal?

It is normal to have some redness and swelling in the area. This generally improves over the first week. Bruising may occur as well and can take 1-2 weeks to resolve.

What are the risks after surgery?

Bleeding

Slight bleeding under the pressure dressing is normal and you may notice dried blood on your bandage when you remove it. More extensive bleeding is only rarely a problem after surgery. If this occurs, you should apply moderate pressure continuously with a clean gauze or washcloth for 20-30 minutes. If there is still active bleeding, please call the clinic or page the covering dermatologist who will instruct you further. Things that increase your risk of bleeding include aspirin, other blood thinners, strenuous activity and bleeding disorders.

Infection

Infection is a risk after Mohs surgery, but is uncommon. Infections usually appear several days after surgery with increased redness, tenderness, swelling and drainage. If you notice any of these symptoms, please call our office. We will generally have you come to the clinic to be checked and prescribe a topical or oral antibiotic if needed.

Allergic Reaction

Allergies to the local anesthetic, lidocaine, are extremely rare. Local allergic reactions to bacitracin ointment are more common, resulting in an itchy rash. In most cases, we recommend sterile vaseline for your wound ointment instead of bacitracin to avoid such reactions. Occasionally people will develop itchy, skin reactions from the irritation of the bandage or adhesive tape.

Recurrence of Tumor

With Mohs surgery, the risk of recurrence is 1-3% for tumors being treated for the first time. If the tumor has previously been treated by another method, and now is being treated with Mohs surgery, the risk of recurrence is slightly higher.

Numbness or Tingling

Even after the scar heals, there may be numbness or tingling over the area. Often the numbness improves over months as small nerves regrow into the area. Sometimes, especially with a skin graft, some degree of numbness can be permanent.

What's normal?

It is normal to have some redness and swelling in the area. This generally improves over the first week. Bruising may occur as well and can take 1-2 weeks to resolve.

In Summary

Patients do extremely well during Mohs surgery. Your comfort is our top priority. Our goal is for you to have a pleasant experience with our team. Please let us know what can be done during the procedure to make you more comfortable and at ease. We look forward to working with you and taking care of you.

MOHS SURGERY CHECKLIST

3 DAYS BEFORE YOUR APPOINTMENT

- ❖ Avoid alcohol starting now to minimize bleeding.
- ❖ Avoid NSAIDs (these are pain medications) such as naproxen / Aleve, ibuprofen / Advil / Motrin. Aspirin that is taken to prevent blood from clotting (prevention of stroke or heart attack) should be continued.

THE NIGHT BEFORE SURGERY

- ❖ Wash the area thoroughly with antibacterial soap such as Dial or Lever 2000.

ON THE DAY OF SURGERY

- ❖ Shower and wash from head to toe with an antibacterial soap. If you are unable to shower early in the morning, please do so the night before your procedure.
- ❖ If the skin cancer is on your face, do not put on any makeup or moisturizer.
- ❖ Take your prescribed morning medications.
- ❖ Eat a light breakfast UNLESS you have been specifically instructed to not eat on the day of surgery.
- ❖ Plan to arrive 15-20 minutes before your appointment to check in.