MOHS MICROGRAPHIC SURGERY

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

WHAT IS MOHS MICROGRAPHIC SURGERY?
Mohs surgery is the most effective method for treating common forms of skin cancer like basal and squamous cell carcinoma, in addition to 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: Dr. Maloney, Dr. Geist, Dr. Goldberg, and Dr. Scharf.

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 and 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.

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) or our dermatology-certified Nurse Practitioner, a surgical nurse or medical assistant, and a histotechnologist (who will process the tissue and take photographs for your medical record). 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 a permission form.

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 removed skin 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. 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, there will be an open wound remaining. 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 (a “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 two to four 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
Take all of your medications as prescribed unless specifically instructed otherwise by a physician.

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 you take ibuprofen (advil, motrin) or naproxen (naprosyn, aleve) on an as-needed basis, please stop these medications 7 days prior to your surgery. If you take any of these medications by prescription, please discuss this with your prescribing doctor first. You may take acetaminophen (tylenol) for pain during this period.

Alcohol
Three days prior to 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 (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 time 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 remolds, 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) as it may increase the risk of bleeding.

**Activities**
In general we recommend that you limit your activities for 2-7 days after the surgery. Your surgery team will give you specific recommendations depending 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 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 around the area. This generally improves over first the 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 to 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** 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 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 topical 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.

IN SUMMARY
Patients do extremely well during Mohs surgery. Your comfort is top priority for us during the procedure. 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.

Sincerely,

The Mohs Surgery Team
MOHS SURGERY CHECKLIST

3 DAYS BEFORE YOUR APPOINTMENT
1. Avoid alcohol starting now to minimize bleeding
2. Avoid NSAIDs (these are pain medications) such as naproxen/Alleve, ibuprofen/Advil/Motrin, and aspirin starting now (UNLESS you are instructed to take them by a physician).

THE NIGHT BEFORE SURGERY (ONLY IF SKIN CANCER IS ON YOUR LEG)
1. If your skin cancer is on your leg, wash the area thoroughly with bath soap such as Dial or Lever 2000.

ON THE DAY OF SURGERY
1. Wash the area over and around the skin cancer gently with a mild soap or cleanser. If the area is on your leg, wash the area again with bath soap.
2. If the skin cancer is on your face, do not put on any makeup
3. Take your prescribed morning medications
4. Eat a light breakfast UNLESS you have been specifically instructed to not eat on the day of surgery
5. Bring some reading, music and/or a companion to keep you company
6. Plan to arrive 15-20 minutes before your appointment to check in