D. P. N .S. Surgical Center 400 Skokie Blvd., Suite 450 Northbrook, IL 60062-7930 Phone 847-272-0022 Fax 847-272-0012



Fellowship trained skin cancer and reconstructive surgeons

Mohs Surgery for the Treatment of Skin Cancer

What is Mohs Micrographic Surgery?

Mohs surgery is a highly specialized treatment for the total removal of skin cancer. This method differs from all other methods of treating skin cancer by the use of complete microscopic examination of all tissues removed surgically, as well as detailed mapping techniques to allow the surgeon to track and remove all of the roots and extensions of the skin cancer.

What are the advantages of Mohs Micrographic Surgery?

By using these detailed mapping techniques with complete microscopic control, the Mohs surgeon can pinpoint areas involved with cancer that are otherwise invisible to the naked eye. Therefore, even the smallest microscopic roots of cancer can be removed. The result is: 1) the removal of as little normal skin as possible, and 2) the highest possibility of curing the cancer.

What is the cure rate?

Mohs surgery is the most accurate method for removing skin cancers, even when previous forms of treatment have failed. In previously untreated cancers, the cure rate with Mohs surgery is 99 percent. In previously treated cancers, where other forms of treatment offer only an 80 percent chance of success, Mohs surgery is 95 percent effective.

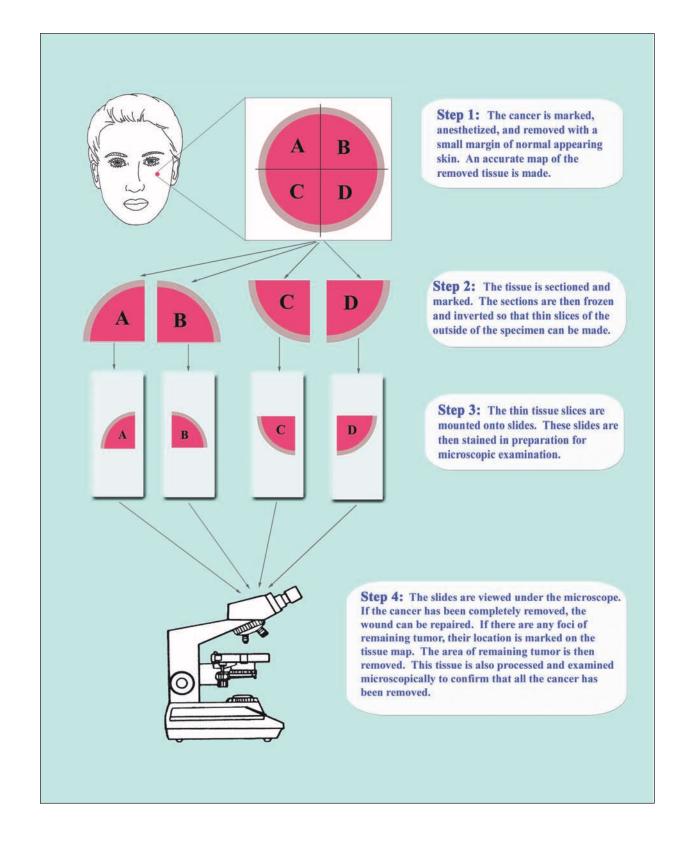
What types of cancers is Mohs Micrographic Surgery most useful for?

Mohs surgery is most useful in treating skin cancers that demonstrate contiguous growth patterns which have a high risk of recurrence or are located in cosmetically sensitive areas such as the face, nose, ears, and eyelids. High-risk tumors include tumors which are larger than one inch in diameter, have indistinct borders, or have recurred after other treatments.

The two most common type of skin cancers treated with Mohs surgery are basal cell carcinomas and squamous cell carcinomas. Both of these tumors grow in a contiguous fashion and can often grow beyond what is seen on the skin's surface and can extend along structures such as nerves, blood vessels, and scars. With the Mohs procedure, these extensions can be followed and removed.

Malignant melanoma that is invasive is not commonly treated with Mohs surgery unless the cancer is located in a cosmetically critical area. Mohs surgery, however, is very useful in treating malignant melanoma that is not yet invasive (in situ), and can help prevent recurrences by facilitating the removal of the subclinical spread of the cancer.

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Is hospitalization necessary?

No. Mohs surgery is performed in a pleasant outpatient surgical suite, and you may return home the same day.

Will my insurance cover the cost of surgery?

Most insurance policies cover the cost of Mohs surgery. However, you should check with your carrier for exact information related to their schedule of payments. On your first visit please bring a copy of your I.D. card, group number, policy name and correct mailing address of your insurance carrier. We accept Medicare assignment. If you have any questions or difficulties understanding billing or payment policies, please contact our billing office.

MOHS MICROGRAPHIC SURGERY – HOW IT WORKS

The preoperative visit

You may be asked to have a preoperative visit prior to undergoing surgery. This visit will give you the opportunity to meet your doctor and his medical staff, and learn more about Mohs micrographic surgery. An examination of the cancer will be performed and a medical history will be obtained. Occasionally, some preoperative tests will be ordered. Reconstruction options may also be discussed. You will have the opportunity to ask any questions you have relating to your upcoming surgery.

Preparation for surgery

It is important that you are as comfortable, relaxed and informed as possible when you arrive for surgery.

- Read the handouts that you have been given.
- Ask any questions that you may have.
- Continue any medications prescribed by your doctor.
 However, aspirin is a drug that may prolong bleeding. We ask that you avoid aspirin (including Anacin, Bufferin, Excedrin, Alka Seltzer and Percodan) for 10 days prior to surgery, so long as your doctor did not specifically prescribe the aspirin for a medical condition (e.g. stroke, heart disease, coronary stent, etc.).
- Discontinue any vitamin E supplements (multivitamins are OK) for 10 days prior to your surgery.
- If you take coumadin, we ask that you have its level checked within 1 week of your surgery.
- If you smoke, try to cut down or quit prior to your procedure and for at least 2 weeks afterwards.
- Do not drink any alcoholic beverages 48 hours prior to surgery, or 24 hours following the procedure.
- As you may not be able to shower for 24 hours after your surgery, you may wish to shower the night before or the morning of your procedure.
- Although most people are in the office for a few hours, we recommend that you plan for the possibility of spending the entire day with us.

On the day of surgery

- Eat a good breakfast.
- Take your usual prescribed medications, unless you have been directed otherwise.
- Take any preoperative medications that we may have prescribed for you.
- Wear loose-fitting clothing. We recommend clothing that can be unbuttoned and removed.
- You may need to bring someone to drive you home. However, we recommend that you only bring one person due to space considerations in our waiting room.
- Plan to arrive at least 15 minutes early so that a medical chart can be prepared. Directions to our office are enclosed. There is ample, convenient parking available.

The removal of the skin cancer

Your appointment will be scheduled early in the day. Our staff will escort you into a surgical suite where you will have the area around the skin cancer numbed. Once it is numb, the visible cancer and a thin layer of tissue will be removed. This tissue is carefully mapped and coded by the surgeon and taken to the adjacent laboratory where the technician will immediately process the microscopic slides. You will have a temporary dressing placed over the wound and you will be able to return to the waiting room.

The surgical procedure alone takes only 10-15 minutes. However, it takes a minimum of 30-60 minutes to prepare and microscopically examine the tissues. Several surgical stages and microscopic examinations may be required, and you will be asked to wait

between stages. Although there is no way to tell before surgery how many stages will be necessary, most cancers are removed in 3 stages or less.

We would like to make the time you spend with us as pleasant and comfortable as possible. You may want to bring reading material to occupy your time while waiting for the microscopic slides to be processed and examined. Magazines will be available in the waiting room area. If your visit extends through the lunch hour, your companion may visit the snack bar located downstairs and bring you a snack or lunch.

The most difficult part of the procedure is waiting for the results of the surgery. Since we do not know in advance how much time is necessary to remove the cancer and repair the wound, we ask that you make no other commitments for the entire day on which you are scheduled for surgery.

The reconstruction after the cancer is removed

Immediately after the cancer is removed, we may choose 1) to allow the wound to heal by itself, 2) to repair the wound with stitches or a skin graft or flap, or 3) to send you to the referring physician or another surgical specialist for wound repair. The decision is based on the safest method that will provide the best cosmetic result. When the reconstruction is to be completed by another surgical specialist, it may take place on the same day or a subsequent day. It is not harmful to delay the reconstruction for several days. Occasionally, this reconstruction may require hospitalization.

Post-surgical care and healing

Your surgical wound will require care during the week(s) following surgery. You will be provided with detailed written instructions after your surgery. Common questions include:

Will the surgery leave a scar?

Yes. Any form of treatment will leave a scar. However, because Mohs surgery removes as little normal tissue as possible, scarring is minimized. Also, complete healing of the surgical site may take up to 12 months. During this time, the surgical site may appear reddened or may feel swollen or lumpy, particularly in the first few months. We recommend that the site be gently massaged beginning one month after the procedure.

•Will I have pain or bruising after surgery?

Most patients do not complain of pain. If there is any discomfort, Tylenol is all that is usually necessary for relief. Avoid taking medications containing aspirin as they may cause bleeding. You may have some bruising around the wound, especially if the surgery is close to the eye.

• Will further procedures need to be done?

Most patients will not require further procedures after the repair of their surgical defect. Some repairs are completed in two stages, with the second stage occurring two to three weeks after the initial surgery. Also, in a minority of patients, some postoperative modification of the surgical site may be performed 6-8 weeks after the primary surgery to optimize the surgical outcome. Occasionally, depending on the type of cancer and its extent, postoperative radiation therapy may be recommended after surgery.

Follow-up visits

Usually only one or two return visits are needed to remove stitches or examine the healed surgical site. Afterwards, you may return to your referring physician for routine check-ups.

A follow-up period of five years for the treated cancer is essential. After having one skin cancer, statistics show that you have a higher chance of developing a second skin cancer. You should have your skin checked by your referring physician at least once a year, not only to examine the treated skin cancers, but also to check for new skin cancers.

Risks associated with Mohs Micrographic Surgery

Although your surgeon will remove as little tissue as possible, there are some general risks associated with the surgery. Your doctor will discuss these and any additional problems associated specifically with your situation.

- As tumors are often larger than their surface appearance indicates, the wound after complete removal of the cancer may be larger than anticipated. Our primary goal is to remove the entire tumor.
- We make every effort to obtain an optimal cosmetic appearance after surgery. With any excisional surgical procedure, scarring will occur at the site of removal.
- Occasionally, the surgical site may be slow to heal, grafts or flaps may fail, or the repair may reopen after closure. The most common risk factors for these include smoking, diabetes, bleeding, poor physical condition, or other disease states.
- Skin cancer frequently involves nerves. With removal of the skin cancer, there may be local numbness or, less common, loss of local muscle movement after the procedure. Occasionally, nearby nerves can be injured during the reconstruction of the defect following surgery. For sensory nerves, sensation will usually return over a time period of up to 24 months. Motor nerves are less likely to have a return of function. For damage to major motor nerves, microsurgical repair may be required to salvage function.
- No procedure can guarantee that the cancer will never recur. With Mohs surgery, however, your cure rates will be maximized.

 Although infection is rare, it can occur. Make sure that you follow your wound care instructions carefully and care for your surgical site on a daily basis.

How can future skin cancers be prevented?

The best protection from skin cancer is to avoid the harmful ultraviolet rays of the sun. Even if you tan easily, the sun can contribute to skin cancer. Minimize your exposure by 1) using a sunscreen with a sun protective factor (SPF) of at least 30 when you spend any time in the sun, 2) wearing broad brimmed hats, 3) minimizing sun exposure during midday hours (10 am to 2 pm), 4) using sun protection even on cloudy days since the ultraviolet light penetrates easily through the clouds. With adequate protection, you should be able to enjoy most of your normal daily activities without significantly increasing your risk of future skin cancers.





Your Mohs Micrographic Surgeon

Dr. James Lahti is a native of the Chicagoland area. He received his M.D. degree from Northwestern Medical School and completed residencies in Internal Medicine at Harvard University and Dermatology at the University of Maryland, where he served as Chief Resident. He completed a Fellowship in Mohs Micrographic Surgery at the Dermatologic Surgicenter in Philadelphia. While there he served on the faculty at Johns Hopkins University. He also received a Masters Degree in Public Health from the University of California, Berkeley. Dr. Lahti is board certified by the American Board of Dermatology. He is a fellow of the American College of Mohs Surgery. He is a clinical instructor at Northwestern University, Feinberg School of Medicine. Dr. Lahti is a member of the American Academy of Dermatology, American Academy of Dermatologic Surgery, American Society of Laser Medicine and Surgery, the American College of Mohs Surgery, and the Skin Cancer Foundation.



Directions to our office:

The Office is located at: 400 Skokie Boulevard, Suite 450, Northbrook, IL

Driving from the North:

Along Route 41: Exit onto west Lake Cook Road. At the intersection with Skokie Boulevard, turn left (south) and drive for 0.65 miles. Our office is on the right hand side of the road.

Along Route 94 (Edens): Exit at Waukegan Road. At the first stop light, turn left onto Dundee Road. Take Dundee Road to Skokie Boulevard and turn left (north). Drive 0.5 miles on Skokie Blvd. Our office is on the left side.

Driving from the South:

Exit Route 94 (the Edens) onto West Dundee Road. At the first intersection turn right on Skokie Boulevard. Drive 0.5 miles to our office, which is on the left side of the road.

Driving from the East or West:

Our office is located on Skokie Boulevard between Lake Cook and Dundee roads. **D. P. N .S. Surgical Center** 400 Skokie Blvd., Suite 450 Northbrook, IL 60062-7930

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