

Dermatology Associates

Mohs Micrographic Surgery

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Using the Mohs Technique for Thin Melanomas

In preparation for your upcoming appointment for Mohs surgery, we would like you to review the enclosed information packet. This information will give you some insight into Mohs micrographic surgery, answer frequently asked questions, and provide directions to our office. Our hope is that this information will answer many of your questions and relieve potential anxiety as your appointment approaches.

Important information:

- Questions concerning your upcoming surgery can be addressed by our Mohs Support Specialist:

423-230-3145

- Continue taking aspirin or blood thinning medications if these have been prescribed by your physician.
- If you take antibiotics prior to dental or other surgical procedures, or have a history of rheumatic fever, heart murmur, artificial heart valve or artificial joint, please call our office prior to your surgery to obtain a prescription for antibiotics.
- Anticipate quite a few stitches. In order to have a superior final cosmetic result it often requires multiple tiny sutures that usually extend outside the area where the cancer is located. Expect bruising and swelling for several days after the surgery.

On the day of your surgery:

- **Bring a driver for your return home**
- **Take all of your normal medications as prescribed**
- **Do not apply makeup, creams, lotions, etc. near the surgery site**
- **Eat a healthy breakfast**

We hope that you will find this information helpful. If you have any further questions after reviewing this material please do not hesitate to call our office.

We look forward to making sure your experience with Mohs surgery is a positive one and appreciate the opportunity to serve you.

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Mohs Micrographic Surgery

Using the Mohs Technique for Thin Melanomas

Mohs surgery, also called Mohs micrographic surgery, is a specialized technique for removing skin cancer. Named for Dr. Frederic Mohs, who developed the technique, Mohs surgery is the treatment of choice for many skin cancers. It is usually utilized to treat basal cell and squamous cell skin cancers, but we have modified the procedure to treat thin melanomas. It offers the following advantages:

- Highest cure rate. The tissue is prepared in our lab which allows for complete microscopic evaluation of 100% of the deep and lateral margins. This allows mapping of the cancer to precisely trace out and remove all the roots.
- Best cosmetic result. Because the roots are traced out using the microscope, there is no need to take a large margin of healthy skin and therefore, the size of the wound left after tumor removal is minimized. Keeping the defect small optimizes the surgical repair, and produces a superior cosmetic result.
- **Mohs surgery is usually done to treat non-melanoma skin cancers (basal cell and squamous cell cancers), but we have modified the procedure to treat thin melanomas in order to allow for better tracing of the melanoma roots.**
- **Usually the Mohs technique involves checking the tissue edges in our office while you wait (all in the same day). For technical reasons, melanomas must be sent to an outside lab for special stains and interpretation and therefore it takes about two days to get the report. Fortunately, we can prepare the tissue in our lab prior to sending it out so that we are able to map the roots with the Mohs technique which allows for evaluation of 100% of the margin. This technique is only done for thin melanomas.**

Mohs surgery is an outpatient procedure that is performed under local anesthesia; therefore the risks associated with prolonged general anesthesia are avoided. Before the surgery begins, a small needle is used to place the numbing medicine in the area surrounding the skin cancer. After this first step, the remainder of the procedure is relatively pain free. The surgeon first removes the obvious skin cancer that can be seen with the unaided eye. Next, a saucer-shaped layer of normal appearing skin is removed taking special care to map the tissue so that the surgeon is able to determine the corresponding margins on the patient. Following this step, the area will be bandaged as no stitches will be placed at this time. You may then return home.

The tissue is then processed by the laboratory located in our office which allows for evaluation of 100% of the margin. After processing, the slides are sent to

board certified dermatopathologists for special staining and interpretation. It usually takes 2 days to get the answer from the pathologist telling us if any of the roots went to the edge. We then will contact you with the next step: either returning to the office to remove more of the edges (only in the area where the roots were left behind) or planning the reconstruction of the resulting defect or open wound.

Because the number of times we may have to take more of the edges is unpredictable, it is impossible to know how long the surgery will take. You should not be concerned with the open area in the meantime, as you will be supplied with bandaging materials and instructed on exactly how to care for the area until all the roots have been removed and the area is repaired.

Frequently Asked Questions

What does "Mohs" stand for?

Dr. Frederic Mohs developed this technique about 60 years ago. The procedure has been modified and refined over the years. Practitioners of the technique have kept Dr. Mohs' name in respect for his contribution. Mohs surgery has other names including Mohs chemosurgery, Mohs microscopically controlled surgery, and Mohs micrographic surgery.

Are there different types of skin cancer?

Yes. The most common type of skin cancer is basal cell carcinoma. Often these skin cancers are very subtle, and appear like a small pimple that will not heal and often bleed. The second most common skin cancer is squamous cell carcinoma. This type usually appears as a thickened scaly plaque or nodule. The third most common type is melanoma, which behaves differently than either basal cell carcinoma or squamous cell carcinoma. Melanoma most commonly appears as an abnormal mole. Only thin melanomas (melanoma *in situ* / lentigo maligna melanoma) are treated with the modified Mohs technique.

Are skin cancers life-threatening?

Fortunately, the two most common types of skin cancer, basal cell carcinoma and squamous cell carcinoma, are rarely life threatening. As a general rule, basal cell carcinoma does not spread to the glands or other parts of the body. Compared to basal cell carcinoma, squamous cell carcinoma has an increased risk to spread to other parts of the body. Fortunately, distant spread is uncommon when the cancer is treated early. However, both types of tumors will continue to grow locally and destroy normal tissue. The third most common type of skin cancer, melanoma, can be life threatening if treated late. For thin melanomas (no depth of invasion) the cure rate is 100% if appropriately treated. Basal cell skin cancers and squamous cell cancers never "turn into" melanoma.

How large of a scar will I have from the surgery?

The size of the scar depends on the size of the tumor. It is often difficult to predict the size of the tumor prior to surgery.

Will I have stitches following the surgery?

Most patients will have stitches. Often patients are surprised at the number of stitches required. Please keep in mind that our goal is the best long term cosmetic result. This may initially require extensive suturing. There are four main ways your surgical wound may be handled:

1. Direct closure of wound with stitches. This is the most common method.
2. Skin flap: In some instances, skin that is located near the wound is moved in to fill the defect left from surgery.
3. Skin graft: In certain situations it is appropriate to take skin from a site distant from the wound (usually in front or behind the ear, or from the neck) and use it to cover the surgical defect.
4. Let wound heal in by itself. The body has an excellent capacity to heal open wounds. This healing period is approximately three to six weeks depending on the size of the wound. It requires regular wound care.

In addition to wound size and location, the surgeon considers other factors in determining how your wound will be handled. This will be fully discussed with you on the day of surgery.

Will I be put to sleep for the surgery?

No. The surgery is well tolerated with local anesthesia. Because the surgery may be time-consuming, the risk of prolonged general anesthesia is thus avoided.

How long will the surgery last?

The length of surgery depends on the extent of the tumor. Because we let the microscope guide us, we cannot predict how many times we might have to take more from the edges.

Should I bring someone with me?

It is often helpful to bring someone with you on the day of surgery. Depending on the size and location of your tumor, driving is sometimes a challenge after surgery, and having a driver with you is a good idea. Additionally, if someone other than the patient will be performing post-op wound care, the nurse can give this person direct instructions, demonstrate wound care, and answer any questions about the surgery.

What should I wear?

You should wear comfortable clothing. You may want to bring a sweater, as our office is kept cool for the laboratory equipment that is needed for this procedure.

Should I eat breakfast before surgery?

Yes. Breakfast is recommended.

Should I take my regular medications on the morning of the surgery?

Yes. Take your regular medications as they have been prescribed.

Are there any medications I should avoid prior to surgery?

If you take aspirin on a regular basis at the direction of your physician, you SHOULD CONTINUE to take it as prescribed. If you have decided yourself to take aspirin, NOT at the recommendation of a physician, it may be beneficial to stop your aspirin 10 days prior to surgery. If you are on any other blood thinners (Coumadin® or warfarin, Plavix®, Ticlid®, etc) please continue taking them as prescribed.

Will my activity be limited after surgery?

Yes. Physical activity, including sports, will be limited for the first week following surgery. If your work requires significant physical exertion, you may be out of work for several days after surgery. An excuse for your absence will be provided if necessary. Avoid any long trips within the first ten days following surgery in case you develop any complications. If you have any questions or special situations please do not hesitate to call our office.

Since I have taken antibiotics before other procedures in the past do I need to take them before Mohs surgery?

If you have taken antibiotics prior to dental or other surgical procedures, or have a history of rheumatic fever, heart murmur, artificial heart valve or artificial joint, we will prescribe one for you prior to Mohs surgery. This will help prevent infection of the heart valve or artificial joint. Pacemakers, implanted defibrillators, mitral valve prolapse and cardiac stents do not generally require antibiotics. The antibiotic used for dental work is best for bacteria found in the mouth and is not as effective for skin surgery. Please contact our office prior to surgery so that we can call or mail a prescription to you for the most appropriate antibiotic.

What are the potential complications of surgery?

Bleeding and infection are the two primary complications. Both of these are uncommon, and can be treated if they do occur. We will discuss how to recognize and deal with these problems when you come for your surgery.

Will my insurance cover the cost of surgery?

Under most circumstances your carrier will pay for surgery. If you are a member of an HMO, it may be necessary to obtain a referral or authorization from your primary physician. If you are in doubt about your particular coverage, you should check with your insurance representative prior to your appointment. If you have specific questions regarding insurance or billing matters, please contact our office at 423-246-4961.

We look forward to making sure your experience with Mohs surgery is a positive one. Please do not hesitate to call with any questions or concerns.

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★ Directions to our office:

From Gray/Johnson City:

From I-26W/(181)/US-23N take exit 1 (old exit 55) (W Stone Dr/11W). Turn left at red light and we are about one mile on the right just before Lowe's. (Dermatology Associates sign in green)

From Bristol/Abingdon/Marion:

From I-81 S towards Knoxville take exit 57B towards Kingsport onto I-26W/(181)/US-23N. Take exit 1 (old exit 55) (W Stone Dr/11W). Turn left at red light and we are about one mile on the right just before Lowe's. (Dermatology Associates sign in green)

From Rogersville:

Follow Lee Hwy/US 11W towards Kingsport. We are on the left just as you pass Wal-Mart and Lowe's. (Dermatology Associates sign in green)

From Weber City/Gate City:

Follow signs to US-23S towards Kingsport. Take exit 1 (old exit 55) (W Stone Dr/11W) and turn onto Stone Dr. We are about one mile on the right just before Lowe's. (Dermatology Associates sign in green)

