

# MOHS MICROGRAPHIC SURGERY AN INFORMATION PAMPHLET FOR PATIENTS

#### WHAT IS MOHS SURGERY?

Mohs surgery (named after Frederic Mohs, the physician who developed the technique) is the most advanced method for the complete removal of most skin cancers. Unlike other methods of treating skin cancer, Mohs micrographic surgery ensures complete removal of skin cancers by microscopic examination of the *entire* surgical margin *at the time of surgery* AND at the same time minimizes the unnecessary removal of normal skin.

Mohs micrographic surgery accomplishes this with the use of detailed, specialized cancer mapping techniques. After the area to be treated is completely numbed with a local anesthetic, the visible cancer and a surrounding, thin layer of skin is removed in the shape of a bowl. This specimen is examined and mapped in three dimensions, including microscopic areas of remaining skin cancer. An additional thin layer of skin is removed from only the area(s) where cancer remains. The process is repeated as often as necessary until the cancer has been completely removed. Therefore you must plan to be here ALL DAY.

## WHAT ARE THE ADVANTAGES OF MOHS SURGERY?

By using specialized, detailed mapping techniques and complete microscopic control, the Mohs surgeon can pinpoint cancerous areas otherwise invisible to the naked eye. In this way, even the smallest microscopic "roots" of cancer can be removed. The results are 1) the removal of as little normal skin as possible, and 2) the greatest chances of complete removal of the skin cancer.

### WHAT ARE MY CHANCES FOR A CURE?

Using Mohs surgery, the cure rate is approximately 99% for most primary skin cancers (skin cancers never treated before) and 95% for recurrent skin cancers (previously treated skin cancers). Other methods of cancer removal offer only a 50% chance of success if previous treatments have failed.

#### IS THE PROCEDURE PAINFUL?

Most patients choose to use local anesthesia, which means that they are awake during the procedure but do not feel any pain. This also has advantages with regards to patient positioning and planning for reconstruction. Although all medications, including local anesthetics, have potential side effects, the risks associated with local anesthesia are less common and less serious than those associated with general anesthesia. If, however, you are extremely anxious or have multiple medical problems, general anesthesia may be an option.

## WILL I BE HOSPITALIZED?

No. Mohs surgery is performed in the office. You will be able to go home the same day as the surgery. In most cases, you will be able to drive home. If a sedative or general anesthesia is used, you will need someone to drive you home after the surgery.



#### WHO WILL PERFORM THE SURGERY?

Dr. Soni & Dr. Fulwider are board-certified dermatologists and fellows of the American Society for MOHS Surgery (ASMS). Also present will be a team of technicians with experience in the technically complex microscope slide preparation.

#### **HOW DO I PREPARE FOR SURGERY?**

#### MEDICATION:.

- Since aspirin may prolong bleeding, we ask that you avoid it and other aspirin-like preparations (e.g. Anacin, Bufferin, Excedrin, Alka-Seltzer, Percodan, Alleve Ibuprofen, Advil, and Motrin) for 14 days prior to surgery if possible. If you are taking prescription blood thinners (e.g. Coumadin, Plavix, Eliquis, Xarelto), you will need to call our office before you schedule surgery. Also, alcohol promotes bleeding, so avoid alcoholic beverages 48 hours before surgery. Vitamin E, gingko, garlic, ginseng, ginger, turmeric, ephedra, and some herbal supplements promote bleeding and should be discontinued at least 2 weeks prior to surgery.
- Taking vitamin C (1 gram daily) and/or Arnica can help with healing after surgery.
- Continue all other medications prescribed by your doctor. Please consult with your primary care physician(s) before stopping or starting any medications.

<u>SMOKING</u>: Since smoking reduces circulation to the skin and interferes with healing, we recommend stopping smoking prior to, during, and for 2 weeks after the surgery.

<u>MEALS</u>: On the day of your surgery, we suggest that you eat your normal meal, so as not to be hungry.

<u>BATHING</u>: Most patients will not be able to shower or shampoo after surgery for 24 to 48 hours. We recommend that you do so prior to your procedure.

MAKE-UP, CLOTHING, & JEWELRY: Please do not wear moisturizers, creams, lotions, or makeup (including eye makeup). Wear only comfortable, loose-fitting clothing that does not go over your head (e.g. button-down or zippers in the front). Remove hairpins, wigs, jewelry. Please do not bring valuables with you.

#### WHAT HAPPENS THE DAY OF SURGERY?

After the local anesthetic is given and the area is numb, the visible cancer and a layer of tissue are removed. This tissue is carefully mapped and coded by the surgeon and then taken to the office-based laboratory where the technician immediately processes the tissue into microscopic slides. A temporary dressing is placed over the wound and you are free to return to the waiting room.

This initial procedure itself takes only 10 to 15 minutes. However, a minimum of one to two hours is required to prepare and microscopically examine the tissue. Several surgical stages and microscopic examinations may be required, and you are asked to wait between the stages. Although there is no way to tell before surgery how many stages will be necessary, most cancers are removed by three 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.



The most difficult part of the procedure is waiting for the results of the tissue mapping and slide interpretation. Since we do not know in advance how much time will be required to remove the cancer and repair the wound, we ask that you make no other commitments for the remainder of the day of the surgery.

#### **WILL I HAVE PAIN AFTER SURGERY?**

Most patients do not complain of pain. If there is any discomfort, it usually lasts one to two days and improves over time. Usually, Tylenol is all that is needed for relief. Avoid taking aspirin-containing medications and ibuprofen, as they may cause bleeding. If you experience pain that worsens day-by-day, please call our office immediately.

#### WHAT CAN / CAN'T I DO AFTER SURGERY?

Generally, we recommend avoiding any activity that puts strain or pressure on the surgical site for a couple of weeks (e.g. contact sports, golf, heavy lifting, stretching or yoga, climbing up or down stairs, etc.) It is best to avoid aerobic activities for 1-2 weeks. Do not soak the surgical site while the stitches are in (e.g. avoid hot tubs & swimming) even though showering and pat-drying afterwards is acceptable. Since fresh scars tend to darken, redden, and take longer to fade with sun exposure, protect the surgical site from the sun's rays (see sun protection tips below).

The surgeon performs the surgery; the patient does the healing. Post-operative instructions (either verbal or written) are designed to optimize healing. It is important that you understand and accept your responsibility to follow these instructions carefully.

#### WILL THE SURGERY LEAVE A SCAR?

Yes. Any form of treatment will leave a scar. However, because Mohs surgery removes as little as possible, scarring is minimized. Also, everyone heals differently depending on a variety of factors such as surgical body site, genetic background, overall state of health, lifestyle, post-operative course, etc.

Immediately after the cancer is removed, we may choose to a) let the wound heal by itself, b) repair the wound with stitches, or c) reconstruct the wound with a skin graft or flap (also with stitches). This decision is based on the safest method that provides the best cosmetic results based on the depth, size, shape, and location of the defect.

# WILL MY INSURANCE COVER THE COST OF SURGERY?

Most insurance policies cover the cost of Mohs surgery. Expenses not covered may include deductibles, copayments, and co-insurances. Some insurance carriers may require an authorization for treatment. Depending on your coverage, a deposit may be required.

Cash patients will be expected to pay the \$1,500.00 fee by noon on the Monday prior to their surgery.

# WILL I NEED TO COME BACK AFTER SURGERY?

Usually one return visit is all that is necessary to examine the healed surgical site and/or to remove the stitches. Sometimes, however, "touch-up" or revision procedures will be required to achieve a desirable result.



Statistics show that after having one skin cancer, you have a much higher chance of developing a second skin cancer. Therefore, you should have a full skin check by your dermatologist periodically, not only to examine the treated skin cancer but also to check for new skin cancers. For a given treated skin cancer, a follow-up period of 5 years is essential.

# HOW CAN I PROTECT MYSELF FROM DEVELOPING MORE SKIN CANCERS?

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 the development of skin cancers in two ways. First, sunlight damages the body's immune system so that early cancers grow unchecked. Second, ultraviolet light damages the cells' DNA, leading to abnormal cells, which can develop into cancer decades after this damage has been done.

You can comfortably minimize your sun exposure by following a few simple recommendations:

- 1. Use sunscreen with a sun protective factor (SPF) of at least 15 when you spend any time outdoors.
- 2. Avoid excessive sun exposure during the mid-day hours (10am-3pm). This is when the ultraviolet B rays are at their peak.
- 3. Be aware that ultraviolet A rays, which are equally as damaging as ultraviolet B, are the same intensity from sunrise to sunset. Therefore, even individuals participating in early morning or late evening outdoor activities require sun protection.
- 4. Remember that even on cloudy days, nearly 80% of the sun's ultraviolet radiation penetrates the clouds.
- 5. Skiers and mountain climbers should remember that there is a 10% increase in the intensity of ultraviolet light for every 3,000 feet of elevation.

Please feel free to call the office at (714) 848-0770 to confirm your surgery date and time. Please arrive at the surgery center 20 minutes before your surgery is scheduled to start.

# \* \* \* CANCELLATIONS \* \* \*

As noted earlier, Mohs micrographic surgery requires the presence of several physicians, technicians, and surgical assistants. During the times set aside for Mohs surgery, the office staff is totally devoted to the accurate and efficient performance of the procedure. Because of this, there may be a waiting list for patients requiring this service. If it is necessary to cancel or reschedule a Mohs surgery appointment, it must be done **at least 72 hours before the appointment**, or an administrative fee may be charged. We appreciate your understanding in this matter.

For more information about Mohs surgery, visit www.mohssurgery.org