

Bradley J. Abrams, D. O.

DERMATOLOGY AND DERMATOLOGIC SURGERY
BOARD CERTIFIED



MOHS SURGERY

This unique form of surgery was developed over 50 years ago by Dr. Frederick Mohs, a professor of surgery at the University of Wisconsin. Since that time, the technique has been refined and advanced so that today it is offered by certified Dermatological Surgeons throughout the country. Its wide acceptance stems from the fact that for certain kinds of skin cancer, it offers a cure rate of approximately 98%.

Mohs surgery is performed by a team specially trained in this technique. The team includes a Mohs certified physician, surgical assistants, and a technician who is responsible for preparing the tissue for microscopic examination. You will meet the entire team at the time of your consultation and/or surgery.

The surgery is done on an outpatient basis, except in rare circumstances. Local anesthesia is used to numb all feeling in the area. First, as much of the tumor as possible is taken off by scraping with a special instrument. A thin layer of skin at the tumor site is then removed. This layer is marked, frozen and stained, so that it can be examined under a microscope. If any cancerous tissue is found at the edges of the first layer of skin, the doctor will repeat the process of removing another layer and preparing it microscopic examination. These steps will be repeated until the entire tumor is removed. Depending on the extent of the tumor, there may be several stages (repetitions or layers) of surgery.

Each stage takes approximately one hour, although the actual surgery requires only 20 minutes. Since we cannot determine in advance how many stages you will require, you should plan to spend the entire day with us. It can take up to 8 hours to completely clear a site of cancerous tissue; however, it rarely takes more than this. The majority of patients are released within 3 to 4 hours.

The major advantage of this technique is that we only have to remove the cancerous tissue, therefore, sacrificing little of the surrounding healthy skin. This is particularly important if the cancer is close to vital structures such as the nose, eyes, or ears. Of course any surgical procedure may leave a scar, but by preserving the

maximum amount of healthy skin, we hope to allow the best cosmetic result. In addition, by viewing the tissue under the microscope at the time of surgery, we can be more confident that the entire skin cancer has been removed.

Since we cannot know ahead of time the extent of the tumor, it is difficult to discuss the repair of the skin until the surgery is completed. There are several ways of repairing the surgical site; 1) to let it heal by itself, 2) to suture the wound together, or 3) using a skin graft or flap, which involves moving healthy skin from elsewhere to cover the defect. When the tumor has been completely removed, and we know the size and shape of the defect, we will discuss with you the best options for repair.

As with any procedure, there may be complications. Complications may include but are not limited to; scarring, infection, nerve damage, hematoma, allergic reactions, flap and graft necrosis, and seroma. Some bleeding during surgery is expected, although it is uncommon for this to occur during the post-operative period. Infection rarely occurs and is controlled by oral antibiotic.

Most scars are numb because sensory nerves have been cut. Sometimes adjacent skin may also be numb for up to 6 months or longer. Rarely the tumor may be located around nerves that control movement so that nerve damage may result from removal of the tumor. Allergic reaction can occur due to the local anesthesia, or bandaging materials. Postoperative discomfort is typically minimal, and most people can return to work the following day.

You can expect some degree of scarring as a result of this procedure; however, it usually matures over several months and becomes acceptable cosmetically. Some scars will be pink and bumpy for three to nine months. Scars that do not mature well can often be revised. Most revisions are done 12 months after the original surgery.

It is important to note that some patients will have their tumors recur even after Mohs surgery has been carefully performed. A recurrence will usually look like a small bump or red scaly area close to or on the scar and is not usually apparent for one to three years. Recurrences are almost always treated by Mohs surgery again because it has the highest cure rate for treatment of recurrent tumors.