Mohs Micrographic Surgery is a specialized procedure for the removal of skin cancers. The procedure is named after the originator of the technique, Dr. Frederick Mohs. The following information is intended to help you understand what Mohs Micrographic Surgery is and why it is recommended for the treatment of your skin cancer.

ABOUT SKIN CANCER

Skin cancer is by far the most common malignant cancer in humans. The most common types of skin cancer are Basal Cell Carcinoma, Squamous Cell Carcinoma and Melanoma. Both Basal Cell Carcinoma and Squamous Cell Carcinoma begin as a single point in the upper layers of the skin and slowly enlarge, spreading both along the surface and downward. These extensions cannot always be seen directly. The tumor often extends far beyond what is visible on the surface of the skin. If not completely removed, both types of skin cancer can invade and destroy structures in their path. Although these skin cancers are locally destructive, they do not tend to metastasize (spread) to distant parts of the body. With Basal Cell Carcinoma, metastasis is extremely rare and usually occurs only in the setting of long-standing large tumors. Squamous Cell Carcinoma is slightly more dangerous, and patients must be observed for spread of the tumor.

Still, such spread is infrequent. Melanoma is a very different and more dangerous kind of skin cancer and will not be considered in this brochure.

Excessive exposure to sunlight is the single most important factor associated with the development of skin cancers. The tendency to develop these cancers appears to be hereditary in certain ethnic groups, especially those with fair complexions and poor tanning abilities. Fair-skinned people develop skin cancers more frequently than dark-skinned people, and the more sun exposure they receive, the more likely they are to develop a skin cancer. Other factors, including exposure to radiation, trauma and certain chemicals, may also be involved in the development of skin cancers.

MOHS MICROGRAPHIC SURGERY

In the more than 50 years since Dr. Mohs pioneered the procedure, Mohs micrographic surgery has become universally recognized as a safe and highly effective means of treating skin malignancies.

Mohs micrographic surgery allows the selective removal of areas involved with skin cancer while preserving as much of the surrounding normal tissue as possible. Because of the complete systematic microscopic search for the "roots" of the skin cancer, Mohs micrographic surgery cure rates are as high as 99% without an excessive loss of normal tissue. As a result, Mohs micrographic surgery is very useful for large tumors, tumors with indistinct borders, tumors near vital functional or cosmetic structures, and tumors for which other forms of therapy have failed. However, no surgeon or technique can guarantee a 100% chance of cure.

The visible tumor may be only the tip of the iceberg.
After the visible portion of the tumor is removed by excision or curettage (debulking), there are two basic steps to each Mohs micrographic surgery stage. First, a thin layer of tissue is surgically removed from the base of the defect created by debulking. Next, this tissue is processed and examined under the microscope. On the microscopic slides, the physician examines the entire bottom surface and the outside edges of the removed tissue. If any tumor is seen during the microscopic examination, its location is established, and a thin layer of additional tissue is excised from the involved area. The microscopic examination is then repeated. The entire process is repeated until no tumor is seen on the microscopic examination.

THE PREOPERATIVE VISIT

The preoperative visit lets the doctor examine your skin cancer, obtain your medical history, and determine whether the technique of Mohs micrographic surgery is the most appropriate treatment for you. It also gives you the opportunity to meet Dr. Sebastien and his staff and learn about the procedure. The skin cancer and surrounding tissue will be photographed before the treatment, as well as during and immediately after the surgery and again after the healing. These photographs become part of your medical record.
The defect created by the removal of the skin cancer may be larger than anticipated. The ability to "track" the extent of the tumor is actually an advantage of the Mohs method. However, the tumor may be much larger than estimated from the surface appearance. There is no way to predict prior to surgery the exact size of the final defect.

There will be a scar at the site of removal. We will make every effort to obtain the best cosmetic results, but our primary goal is to remove the entire tumor. The cosmetic outcome cannot be guaranteed.

There may be poor wound healing. At times, in spite of our best efforts, for various reasons (such as bleeding, poor overall physical condition, diabetes, or other disease states), healing is slow or the wound may reopen. Flaps and grafts used to repair the defect may sometimes fail. Under these circumstances, the wound will usually be left to heal on its own.

There may be loss of motor (muscle) or sensory (feeling) nerve function. Sometimes the tumor invades nerve fibers. When this happens, the nerves must be removed along with the tumor. At other times, the tumor or the tissue moved in the reconstruction of the defect, is adjacent to nerve fibers. At these times, nerves may also be severed or injured. If the sensory nerve is injured or removed, numbness results. Sensation will usually, but not always, return. It may take up to 24 months for sensation to return. If motor nerve is involved, you may be unable to move the muscle that the nerve served. An example of this would be the inability to wrinkle your forehead. In most, but not all circumstances, this nerve function will return over a prolonged period of time. If a major motor nerve function is involved, microsurgical repair may be required. Prior to your surgery, Dr. Sebastien will inform you of any major nerves which may be near your tumor.

The tumor may involve an important structure. Because tumors often occur on the head and neck, many are near or on vital structures such as the eyes, nose or lips. If the tumor involves these structures, portions of them may have to be removed with resulting cosmetic or functional deformities. Furthermore, repair of the resulting defect may involve some of these structures. The doctor will discuss this with you prior to surgery with regard to the particular location of your tumor.

The wound may become infected. A small number of surgical wounds (less than 5%) become infected and require antibiotic treatment. If you have a particular risk for infection, you may be given an antibiotic prior to the surgery.

There may be excessive bleeding from the wound. Such bleeding can usually be controlled during surgery. There may also be bleeding after surgery. There is very rarely a significant amount of blood loss, but bleeding into a sutured graft or flap may inhibit good wound healing.

There may be an adverse reaction to medications used. We will screen you carefully for any history of past problems with medications; however, new reactions to medications may occur.

There is a small chance (1-3%) your tumor may regrow after surgery. Previously treated tumors and large, long-standing tumors have the greatest chance for recurrence.