



MOHS SURGERY -- INFORMATION SHEET

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What is Mohs micrographic surgery?

This special advanced technique involves removing skin cancer and examining inked and stained sections of frozen skin under the microscope. The skin cancer is carefully and completely mapped until all areas in which cancer has been demonstrated are shown to be free of any tumor. The main difference between Mohs micrographic surgery and traditional methods of treating skin cancer is this immediate *microscopic control*.

When is Mohs micrographic surgery indicated?

Mohs is now recognized as the most precise method of removing skin cancer. It is especially effective in treating cancers of the face and other cosmetically sensitive areas because it can virtually eliminate all cancer cells while causing minimal damage to the surrounding normal skin. It is also ideal in removing recurrent skin cancers because in these tumors the clinical margins are often hard to appreciate and subtle nest of cancer can be embedded within scar tissue and normal-appearing skin. Extremely high cure rates (97-99%) can be achieved with Mohs micrographic surgery even for recurrent cancer. Other considerations in choosing Mohs micrographic surgery include an invasive or aggressive appearance under the microscope, an excessively large or very deep tumor, any tumor with poorly borders that are difficult to see, areas known to have high recurrence rates (for example nose, ear, eyelid), and any cosmetically or functionally important area (for example nose, ear, eyelid, digits, penis).

How is Mohs micrographic surgery performed?

The first step involves removing the visually apparent tumor with a surgical scalpel. The specimen is then cut into pieces as if a pie. Each piece is color-coded and systematically mapped onto a precise diagram of the site so that a carefully created depiction of the tumor area and the pieces of the removed skin is created. A trained Mohs histotechnician then prepares frozen sections of these tumor pieces under the supervision of the Mohs surgeon. The tumor is removed and tissue processed in such a way that the depth of the tissue submitted and the most peripheral skin edge will be available for microscopic examination. In this way, both the deep and lateral margins can be completely examined. If residual tumor is identified additional stages are undertaken until a cancer-free plane is achieved.

Where is Mohs micrographic surgery performed?

It is usually performed in an outpatient facility like this doctor's office and under local anesthesia. Surgery begins early in the morning as is almost always finished the same day unless the tumor is unusually aggressive or extensive.

Is Mohs micrographic surgery time consuming?

Often! Because this technique is reserved for certain tumors that are more difficult to manage, time is dedicated to the precision required by this special type of layered removal, laboratory preparation, and examination under the microscope. All of these skills are delicate and require time and care.

Does the patient stay in the operating room between stages?

No. The wound is temporarily dressed and the patient is placed in a comfortable waiting area. Waiting is inherent to the Mohs process so the patient is encouraged to bring work, reading, or other hobbies to pass the time. Also, each patient is given a long-acting anesthetic so they remain numb between the stages and don't have to endure the needle stick with every stage of the procedure.

How extensive are the scars after Mohs micrographic surgery?

The precision of the Mohs technique allows the maximum preservation of normal skin which almost always results in smaller defects than traditional ways of treating skin cancer. In addition, a Mohs surgeon is trained in and experienced with cosmetic reconstructions of the defects left after the cancer is removed. Although the first and primary goal is removal of the tumor, the Mohs surgeon strives for cosmetically superior outcomes.

Who performs Mohs micrographic surgery?

The American College of Mohs Micrographic Surgery and Cutaneous Oncology currently recognizes more than 50 training centers in the United States. These fellowships are undertaken after the completion of residency training and allow 1-2 years of dedicated training to the Mohs micrographic surgery technique and subsequent cosmetic reconstructions of defects following removal of the skin cancer. Many dermatologists know the basic techniques and may employ them in their practice; however patients are encouraged to receive care from a fellowship-trained member of the College.