1. What is Mohs surgery (Mohs micrographic surgery)?

The term "Mohs" refers to Dr. Frederic Mohs, Professor of Surgery at the University of Wisconsin, who developed this surgical technique in the early 1940s. The technique has undergone many refinements and has come to be known as "Mohs surgery" in honor of Dr. Mohs.

Dr. Mohs recognized that a skin cancer often resembles a "tip of the iceberg" with more tumor cells growing downward and outward into the skin, like the roots of a tree. These "roots" are not visible with the naked eye, but can be seen under a microscope.

Mohs Micrographic Surgery is a highly specialized and precise treatment for skin cancer in which the cancer is removed in stages, one tissue layer at a time. It is an outpatient procedure. The removal technique is no different than other procedures; however it is distinguished by a specific technique of tissue examination that is unique to Mohs surgery. Although some plastic surgeons and other specialists check excision margins, pathologic examination of the tissue is not the same as Mohs surgery.

Once a tissue layer is removed, the edges are marked with specially colored dyes, and a map of the specimen is created. The tissue is then processed onto microscope slides by a Mohs histotechnologist. These slides are carefully examined under the microscope by the Mohs surgeon so that any microscopic roots of the cancer can be precisely identified and mapped. When cancer cells are seen, an additional tissue layer is removed only in areas where the cancer is still present, leaving normal skin intact. This saves as much normal, healthy skin as possible. Once the cancer has been removed, the Mohs surgeon will explain options for repair of the wound, including natural healing (granulation), suturing the wound together by a side to side closure, or using a skin flap or graft.

Mohs surgeons who are members of the American College of Mohs Surgery have undergone at least one year of fellowship training beyond dermatology residency, which allows for additional experience in all these specialized processes and techniques.

2. Why is it called Mohs surgery? Is it an acronym?

The Mohs micrographic procedure was named after Dr. Frederic Mohs who discovered and developed it at the University of Wisconsin Medical Center in the 1940s. It has since been refined to the state-of-the-art treatment that it is today.

3. I've heard that Mohs surgery will take all day.

When advising a patient about their surgery, a Mohs surgeon will tell the patient to anticipate that the procedure will take at least half a day, if not the better part of a day. Because the Mohs procedure involves removing the entire cancer in one visit, and saving as much of the healthy surrounding tissue as possible, the surgeon will remove a small piece of tissue, then immediately analyze the tissue. The surgeon will repeat this process several times, if necessary, until all the cancer has been removed. While the process is time consuming, it ensures that the entire tumor is removed.

The largest portion of your day having Mohs surgery will be spent waiting as the surgeon processes and examines the tissue they have removed. Another time consuming period is the meticulous reconstructive surgery following the complete removal of the cancer, to ensure the best cosmetic result.

4. How often is Mohs surgery successful?

The cure rate for Mohs surgery is as high as 99 percent for the removal of a basal cell skin cancer, and 95 percent for squamous cell skin cancer and recurrent cancers.
5. Why does my skin cancer need to have Mohs surgery?

BECAUSE:

- the skin cancer is in an area where it is important to preserve healthy tissue for maximum functional and cosmetic result, such as eyelids, nose, ears, lips, fingers, toes, and genitals;
- the skin cancer was treated previously and has come back;
- scar tissue exists in the area of the skin cancer;
- the skin cancer is large;
- the edges of the skin cancer cannot be clearly defined;
- the skin cancer is growing rapidly or uncontrollably;
- the skin cancer is of an aggressive subtype (i.e. sclerosing or infiltrating basal cell carcinoma).

6. Will there be a scar from my Mohs surgery?

Yes. Any treatment for skin cancer will leave a scar. Mohs surgery preserves as much normal skin as possible and maximizes options for repairing the area where the skin cancer had been. Once the Mohs College surgeon has completely removed your skin cancer, optimizing the final cosmetic result of your surgery becomes our highest priority. Generally, a post-surgical scar improves with time and can take up to one year or more to fully mature. As your surgical site heals, new blood vessels can appear and support the healing changes occurring underneath the skin. This can result in the reddish appearance of the scar. This change is temporary and will improve with time.

In addition, the normal healing process involves a period of skin contraction, which often peaks 4-6 weeks after the surgery. This may appear as a bumpiness or hardening of the scar. On the face, this change is nearly always temporary and the scar will soften and improve with time. If you have a history of abnormal scarring, such as hypertrophic scars or keloids, or if there are problems with the healing of your scar, injections or other treatments may be used to optimize the cosmetic result. Your Mohs College surgeon is available for you throughout the healing process to discuss any concerns that may arise.

7. Do I need to continue to see my dermatologist if I go see a Mohs surgeon?

Yes. Your dermatologist is an important part of maintaining healthy, disease free skin on your entire body and you should visit the dermatologist on a regular basis.

8. What is a fellowship trained Mohs surgeon?

The American College of Mohs Surgery (ACMS) fellowship is an additional course of study for one to two years that provides the opportunity for surgeons to become highly skilled in Mohs surgery which includes the following:

- Removal of the skin cancer tumors;
- Microscopic mapping and analysis (pathology) of the removed cancerous tissue, which helps determine the extent of the cancer;
- Reconstruction, which involves repairing the wound and minimizing scarring.

During the fellowship, each surgeon-in-training must participate in a minimum of 500 cases under the supervision of a Mohs College approved, fellowship-trained instructor (surgeon).