

MOHS

MICROSCOPICALLY CONTROLLED SURGICAL EXCISION



LLOYD J. CLEAVER, D.O., L.L.C.
Dermatology
Dermatologic Surgery

KIRKSVILLE COLLEGE OF OSTEOPATHIC MEDICINE
700 West Jefferson St. • Kirksville, MO 63501 • 660-626-2191
TOLL FREE: 1-800-428-3376 (In-State) • 1-800-626-5286 (Out-of-State)

WHAT DOES MOHS MEAN?

Mohs Surgery is named after its inventor, Dr. Frederic Mohs, who perfected this form of surgical treatment for skin cancers in the mid 1930's.

HOW IS MOHS MICROSCOPIC CONTROLLED SURGERY PERFORMED?

Today there are three separate steps to the fresh tissue technique.

1. Curettage {scraping of the visible part of the skin cancer}.
2. Surgical removal {excision} to a certain depth of that tissue, and
3. Examination of the excised tissue under the microscope.

Before this tissue is examined, it is marked with colored dyes to distinguish top from bottom and right from left. By doing this, we are able to pinpoint the exact location of any remaining tumor during the microscopic examination. If more cancer is found, the procedure is repeated, but only in the area of the remaining cancer.

HOW LONG DOES IT TAKE?

Total removal of a skin cancer, which may involve several sessions of a few hours duration, is usually completed in one day. After the surgery, a decision is made as to the best way to manage the wound created by the surgery.

HOW EFFECTIVE IS MOHS SURGERY IN THE TREATMENT OF SKIN CANCER?

Using the Mohs surgery technique, the percentage of success is very high, often 97% to 99%, even if other forms of treatment have failed. Therefore, with this technique, an excellent chance of cure is achieved, however, no one can guarantee a 100% chance of cure.

WHAT ARE THE ADVANTAGES OF MOHS SURGERY?

Using microscopic examination, the Mohs surgeon can pinpoint areas involving cancer and selectively remove tissues only from that area. In this way, the skin cancer is traced out to its roots. This results in the removal of as little normal tissue as possible and the highest chance of cure. Other forms of therapy frequently have only a 50% to 70% chance of success in curing skin cancers that have had previously unsuccessful treatment.

HOW MANY SESSIONS OF MOHS SURGERY WILL I NEED?

This depends entirely on how deep or extensive your skin cancer is. Unfortunately, there is no way to determine this prior to surgery.

HOW LONG DOES THE SURGERY TAKE?

Each step {or stage} of the procedure takes about 1 to 30 minutes. Following the surgery it usually takes about an hour for the slides to be prepared for microscopic examination. Several surgical stages and microscopic examinations may be required.

SHOULD SOMEONE COME WITH ME ON THE DAY OF SURGERY?

Yes, it may be pleasant to have company while sitting between surgeries, and it is recommended that you have someone to drive you home.

WHAT HAPPENS ON THE DAY OF SURGERY?

Appointments for surgery are usually scheduled early in the day. This allows us to continue throughout the entire day if necessary.

The next step is for the surgeon to surgically remove a thin layer of skin involved with the cancer. After this tissue has been carefully removed, bleeding is stopped with a cauterizing machine that generates heat. The nurse will dress your wound and the removed tissue is taken to our pathology lab for microscopic examination.

It usually takes about an hour to prepare the slides, although sometimes it may take somewhat longer.

If examination of the slides reveal that your tissue still contains cancer cells, the procedure will be repeated as soon as possible. Several surgical excisions and microscopic examinations may have to be done in one day, and seldom is it necessary to have a patient return the following day for additional surgery.

HOW MANY SURGICAL SESSIONS ARE THERE?

The average number of surgical sessions is two to three; so most patients are finished by mid day. If you must stay longer you can have lunch, either going with family or we will make arrangements to have something brought from the cafeteria.

WILL I HAVE PAIN AFTER SURGERY?

Most patients do not complain of pain. If you are uncomfortable, we recommend taking 2 Tylenol every four to six hours. Avoid aspirin containing products such as Anacin or Bufferin as these may produce bleeding.

WHAT IS THE NEXT STEP AFTER MOHS SURGERY HAS BEEN COMPLETED?

When it has been determined that the skin cancer has been completely removed, a decision is made on how to repair the wound created by the surgery. Usually, there are three choices:

1. To close the wound with stitches,
2. To let the wound heal in by secondary intention,
3. To cover the wound with a skin graft or flap.

We will recommend which of these choices will be best for your individual case.

WHAT ABOUT BLEEDING AFTER THE SURGERY?

Rarely does bleeding occur following surgery. If this should happen, lie down and place steady, firm pressure over the bandage as close as possible to the area that is oozing blood. Apply the pressure continuously for 30 minutes. Do not lift the bandage to check on the bleeding. If the bleeding persists after 30 minutes of steady pressure call Dr. Cleaver.

WHAT ARE OTHER POSSIBLE COMPLICATIONS?

All wounds develop a small, surrounding halo of redness, which disappears gradually. Severe itching with extensive redness may indicate a reaction to adhesive tape. You should call our office if this develops.

Swelling is common following Mohs surgery, particularly when it is performed around the eyes. All wounds show a moderate amount of swelling. Usually, this is not a problem.

We usually insist on frequent dressing changes because all wounds normally drain. The nurse will review this with you before you leave.

WHAT HAPPENS AFTER THE WOUND HAS HEALED?

You may experience a sensation of tightness, or drawing, as the wound heals, this is normal. After several months, you will feel this less and less.

Frequently, tumors involve nerves, and it may take up to a year or two before feeling returns to normal, or near normal. Sometimes the area stays permanently numb; only time will tell.

The new skin that grows over the wound contains many more blood vessels than the skin that was removed. This results in a red scar, and the area may be more sensitive to temperature changes {such as cold air}. This sensitivity improves with time, and the redness gradually fades. However, if you are having a lot of discomfort, try to avoid extremes of temperature.

Patients frequently experience itching after their wounds have healed. This is because the new skin that covers the wound does not contain as many oil glands. The use of plain petroleum {Vaseline} will help relieve the itching.

LATER ON, MUST I AVOID THE SUN?

~~No, not entirely. We do not think that sunshine will be harmful to you as long as you provide yourself with adequate protection, avoid burning, and use discretion.~~

As mentioned earlier, sunlight probably is the main contributing factor in the development of skin cancers, and patients who have developed one skin cancer often will develop more at a later time. Therefore, in the future, when you go into the sun, we recommend that you liberally apply sunscreen with a sun protection factor {SPF} of 15 or higher to all exposed skin, including the tops of the ears.

It is best to apply the sunscreen 15 to 30 minutes before going outdoors. Be sure to reapply every two hours and after swimming or exercising since most sunscreens wash off with water or perspiration.

In addition to a sunscreen, you may wish to wear a broad -rimmed hat and utilize protective clothing. Now available at the Dermatology Skin Spa, located across the hall from our office, is a full line of sun protective clothing. The clothing's special patent offers an SPF of 30 or more and blocks both UVA and UVB light.

Yes, you can have a normal life style, if you take precautions. Remember, an ounce of prevention is worth a pound of cure.

FOR FURTHER QUESTIONS: Contact the office at 660-626-2191 or 1 800-428-3376 in state or 1 800-626-5266 for out of state calls