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Central Ohio Skin and Cancer



Mohs Surgery has the highest cure rate of any treatment option for skin cancer. Mohs is efficient: the cancer is removed, analyzed and the wound is repaired... all in the same day.

Mohs is performed in the outpatient setting. Mohs is cost effective and eliminates the need of an O.R., and no risk of general anesthesia.

Mohs Surgery is named after its inventor, Dr. Frederic Mohs.

He began his work at the University of Wisconsin in 1936 and later founded the American College of Mohs Surgery in 1967.



While any physician can practice Mohs Surgery, only dermatologists who are chosen for a 1-2-year fellowship are ACMS certified.



Training in these fellowships exposes the dermatologist to rare and complex tumors.

Fellows spend time learning to read pathology as well as surgical techniques.

Surgical techniques focus on safely removing the least amount of normal tissue while still eliminating the tumor.

Once the cancer is resected, the wound needs to be repaired and Mohs Surgeons are trained in reconstruction skills to provide the best cosmetic outcome.

#### **Mohs Surgery Process**

The patient is injected with a local anesthetic.

A piece of tissue with cancer is removed and the patient is bandaged. This tissue is inked, frozen, and sliced into very thin layers. These layers are placed on slides which then undergo a staining process.

The Mohs surgeon reviews the slides and looks for any cancer cells on the peripheral and deep margins of the tissue.

During this waiting period, the patient can wait in our office, their car, or quickly visit one of the surrounding restaurants or coffee shops.

If the cancer extends to the specimen margins, more tissue is removed at that location. Once the cancer is cleared, the patient's wound is then reconstructed, and wound care instructions are reviewed.

The patient is then able to leave and go home.

We often recommend that the patient avoid physical activities at least for a few days to avoid any excess bleeding or swelling.





The roots of a skin cancer may extend beyond the visible portion of the tumor. If these roots are not removed, the cancer will recur.

Local anesthesia is injected to numb the area completely, and the visible portion of the tumor is removed.





2 A first layer of tissue with a narrow margin around the tumor is surgically removed. The wound is bandaged temporarily while lab work begins.

3 The surgeon cuts the tissue into sections, color-codes them with dyes and draws a map of the surgical site. In the lab, the divided tissue is

frozen and very thin horizontal slices are cut, placed on microscope slides and stained for examination. American College of Mohs Surgery Fellowship trained skin cancer and reconstructive surgeons



4 The undersurface and edges of each tissue section are examined under a microscope by the surgeon for evidence of remaining cancer.

5 If cancer cells are found under the microscope, the surgeon marks their location on the "map" and returns to the patient to remove another layer of skin—but only from precisely where the cancer cells remain. This process is repeated until there is no evidence of cancer remaining.

Clear margins

6 The wound may be left open to heal or closed with stitches, depending on its size and location. In most cases, the surgeon will repair the wound immediately after obtaining clear margins. In some cases, a wound may need reconstruction with a skin flap, where neighboring tissue is moved into the wound, or possibly a skin graft. In some instances, your Mohs surgeon may coordinate repair with another specialist.

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#### **Skin Cancer Statistics**

It is estimated that 1 in 5 Americans will get skin cancer by the age of 70. Non melanoma skin cancers have increased 77% from 1994 to 2014. Basal cell carcinoma (BCC) is by far the most common type, followed by squamous cell carcinoma (SCC). Melanoma is a distant third.

90% of the time the cancer is caused by ultraviolet radiation from the sun. Other causes are: Indoor tanning Ionizing Radiation Inherited Diseases Viruses/Immunosuppression



## Basal Cell Carcinoma

BCC is the most common skin cancer, and most common overall cancer in humans. It almost always occurs in areas of previous sun exposure.

BCCs can have many clinical appearances, from looking like a scar, to a flat red scaly patch, to a "pimple" or raised flesh-toned lesion.

One of the most common appearances of BCCs is a slightly raised, glistening or pearly pink to flesh-toned bump, sometimes with tiny dilated red vessels apparent.

They are slow growing, and eventually will start to bleed or scab.

## **Basal Cell Carcinoma**





## Squamous Cell Carcinoma

SCC is the 2<sup>nd</sup> most common type of skin cancer and is also commonly found in areas that had previous ultraviolet light exposure.

Common presentations are red scaly/crusted patches, or growing tender raised "bumps" or nodules.



# Squamous Cell Carcinoma





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see mohscollege.org for more info.

