

# What Now? Micrographic Surgery Mohs

You've Been

Diagnosed

With Skin

Cancer

Or Your

Treatment

Has Failed –

What Now?

# What Now?

If you have been diagnosed with skin cancer, you may be frightened – wondering how this might have happened, what you can do about it, and above all – whether you're in serious danger. You're not alone. More than 1.2 million people in the United States are diagnosed with skin cancer each year, and most have probably felt the same way you do.

A diagnosis of skin cancer is cause for concern – if left untreated, the disease can continue to progress.

However, it needn't be cause for panic. Skin cancer is not necessarily life threatening nor does its therapy have to be disfiguring. Advanced treatment is available that offers the highest potential for cure while minimizing the cosmetic impact – even if previous treatments have failed.

## What First? Know the Facts!

*Skin Cancer May be More than Meets the Eye*

Not all treatments for skin cancer are equal. Options range from common treatments offered by many physicians such as scraping and burning, freezing, radiation and routine excision, to Mohs surgery, an advanced surgical technique performed by a highly trained specialist. You should be aware of the benefits and drawbacks of various options and choose a treatment that will remove *all* the cancer, minimize the risk of recurrence, and leave as little scarring as possible.

When considering options, or to understand why previous treatments may have failed, it is important to recognize that the tumor that is visible to you – even to your physician – may be just the “tip of the iceberg.” Not all cancer cells are apparent to the naked eye. Many “invisible” cells may form roots or “fingers” of diseased tissue that can extend beyond the boundaries of the visible cancer. If these cancer cells are not completely removed, they can lead to regrowth and recurrence of the tumor.

Types of cancer most likely to form these complicated root systems are those that:

- are located in cosmetically sensitive or functionally critical areas around the eyes, nose, lips or scalp
- grow rapidly and/or uncontrollably
- have been previously treated

For these cancers, common treatment methods are often not successful because they rely on the human eye to determine the extent of the cancer. These methods can remove too *little* cancer, which could cause it to recur and require additional surgery, or too *much* healthy tissue, which could cause unnecessary scarring.

Once a cancer has been treated by one of these common methods and it recurs, the chances of it being cured when treated again by one of these methods becomes less likely. The scar tissue surrounding a recurrent cancer makes it extremely challenging to differentiate between healthy skin and cancerous tissue and further complicates the determination of how much tissue to remove.

## What Next? Put Your Mind at Ease

### *Mohs Micrographic Surgery is Advanced Treatment that Gets the Job Done*

Mohs micrographic surgery is state-of-the-art treatment for skin cancer in which the physician serves as surgeon, pathologist and reconstructive surgeon. It relies on the precision and accuracy of a microscope to trace and ensure removal of skin cancer – down to its roots.

Of all treatments for skin cancer, Mohs micrographic surgery:

- offers the highest cure rate (up to 99%)<sup>1</sup>
- has the lowest chance of regrowth
- minimizes the potential for scarring or disfigurement
- is the most exact and precise means of removal

For decades, Mohs micrographic surgery has proven effective in getting to the roots of skin cancer by combining the surgical removal of cancer with the immediate microscopic examination of the tumor and underlying diseased tissue. This process allows dermatologists trained in Mohs surgery to see beyond the visible disease and precisely identify and remove the *entire* tumor...and nothing but the tumor.

<sup>1</sup>Based on data for treating basal and squamous cell carcinomas.

Mohs surgeons examine the removed tissue for evidence of extended cancer roots. Once the visible tumor is removed, Mohs surgeons trace the paths of the tumor using two key tools:

- a map of the surgical site
- a microscope

Once the obvious tumor is removed, Mohs surgeons:

- remove an additional, thin layer of tissue from the tumor site
- create a “map” or drawing of the removed tissue to be used as a guide to the precise location of any remaining cancer cells
- microscopically examine the removed tissue thoroughly to check for evidence of remaining cancer cells

If any of the sections contain cancer cells, Mohs surgeons:

- return to the specific area of the tumor site as indicated by the map
- remove another thin layer of tissue *only* from the specific area within each section where cancer cells were detected
- microscopically examine the newly removed tissue for additional cancer cells

If microscopic analysis still shows evidence of disease, the process continues layer-by-layer until the cancer is completely gone.

Once the removed tissue shows no sign of disease, the removal process stops – preserving or “saving” healthy, normal tissue. This technique ensures that all the diseased tissue – and *only* the diseased tissue – is removed, thereby minimizing the cosmetic impact.



**Step 1** 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.

**Step 2** The visible portion of the tumor is surgically removed.

**Step 3** A layer of skin is then removed and divided into sections. The Mohs surgeon then color codes each of these sections with dyes and makes reference marks on the skin to show the source of these sections. A map of the surgical site is then drawn.

**Step 4** The undersurface and edges of each section are then microscopically examined for evidence of remaining cancer.

**Step 5** If cancer cells are found under the microscope, the surgeon marks their location onto the “map” and returns to the patient to remove another layer of skin – but only precisely where the cancer cells remain.

**Step 6** The removal process stops when there is no longer any evidence of cancer remaining in the surgical site. Because Mohs surgery removes only tissue containing cancer, it ensures that the healthy tissue is kept intact.

Mohs surgeons are physicians who have extensive knowledge of the skin and its healing properties, as well as training in reconstructive surgery. They are best suited to understand wound management, which helps produce the best cosmetic result. Most Mohs surgeons will perform the reconstructive surgery necessary to repair the wound at the time of the surgery.

Mohs micrographic surgery is effective for most types of skin cancer, but is most commonly used to treat basal and squamous cell carcinomas.

Mohs surgery is the treatment of choice when:

- the cancer is large
- the edges of the cancer cannot be clearly defined
- the cancer is in an area of the body where it is important to preserve healthy tissue for the maximum functional and cosmetic result, or is likely to recur if treated by common methods (eyelids, nose, ears, lips)
- prior treatment has failed

## What Can You Expect from Mohs Surgery?

*Quick Resolution, Rapid Recovery –  
Peace of Mind*

Mohs micrographic surgery is usually performed on an outpatient basis, under local anesthesia. The healing process is similar to that of most surgical procedures.



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## Who Can You Talk To?

*Ask Your Physician or Consult the ACMMSCO  
Web site*

The American College of Mohs Micrographic Surgery and Cutaneous Oncology (ACMMSCO) is dedicated to advancing standards of training and care within Mohs micrographic surgery. Membership requirements of the ACMMSCO state that physicians must have completed a one or two year fellowship program at an ACMMSCO-approved training facility. This training includes participation in at least 500 Mohs micrographic surgery cases, under the supervision of an experienced, ACMMSCO-approved Mohs surgeon. To locate a physician member of the ACMMSCO in your area, consult the *Find a Surgeon* feature on the official ACMMSCO Web site: [www.mohscollege.org](http://www.mohscollege.org).

*Meanwhile ...*

While you're seeking treatment – and after – remember that the diagnosis of skin cancer *does* require you to make some changes to protect your skin, but these changes don't have to be drastic. Taking the following precautions can help to reduce the likelihood that additional skin cancers will develop and/or ensure their early detection:

- Protect yourself from the sun
- Be aware of any new or existing lesions on your skin that appear to be growing or bleed intermittently

If any of these skin changes occur, see your doctor.



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