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Mohs Micrographic Surgery

Patient Information

Developed by Consultant Dermatologists Ninewells
Hospital and has been reviewed by patients

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Delivery Unit

The aim of this leaflet is to give you information about Mohs Micrographic Surgery.

What is Mohs Surgery?

Mohs surgery is a specialised, highly effective technique for removing skin cancers. It was developed in the 1930s and is now practiced throughout the world.

Mohs surgery differs from other skin cancer treatments in that it permits the immediate and complete microscopic examination of the removed cancer tissue so that all roots and extensions of the cancer can be eliminated. Mohs surgery has the highest reported cure rate of all treatments for skin cancer.

Treating all skin cancers with Mohs surgery is not necessary. Mohs surgery is reserved for skin cancers that grow back after previous treatment, cancers that are at high risk of recurring, or cancers that are located in cosmetic areas where preservation of the maximum amount of normal skin is important.

Who will be doing the Mohs surgery?

Physicians who have the training, surgical and laboratory facilities, and staff to perform this specialised technique practice Mohs surgery.

Will I have pain, bruising or swelling after surgery?

Most patients do not complain of significant pain. If there is discomfort, **Paracetamol** is usually all that is necessary for relief. However, stronger pain medications will be prescribed when needed.

You may have some bruising and swelling around the wound, especially if surgery is being done close to the eyes.

How long does it take?

In straight forward cases, you can be away by early afternoon. Sometimes it takes until early evening to finish the whole process. We therefore ask that you reserve the entire day for surgery, in case additional surgical sessions are required.

Will it leave a scar?

Yes. Any skin surgery will leave a scar but we find that our results are good in terms of the appearance and generally people are very satisfied with everything. However we do like to see you back for check up appointments, usually at 1 week and then 3 months, when any other treatments to improve the appearance can be discussed.

That is, the entire undersurface and the complete edge of the specimen is examined. All microscopic roots of the cancer can thus be precisely identified and pinpointed on the Mohs map.

If more cancer is found on the microscopic slides, Dr Fleming / Dr Affleck uses the Mohs map to remove additional tissue **only where cancer is present**.

This allows the Mohs surgery technique to leave the smallest possible surgical defect because no guess work is involved in deciding where to remove the additional tissue. Only tissue around the “roots” and extensions of cancer is removed.

What happens after the Mohs surgery is completed?

When the cancer is removed, the Mohs surgeon will discuss with you your options.

These may include:

- Allowing the wound to heal naturally, without additional surgery (often produces the best cosmetic result)
- Wound repair by Mohs surgeon
- Wound repair by referring physician or making arrangements for wound repair
- Referral to another surgeon for wound closure

Dr Colin Fleming and Dr A Affleck have received specialised training in Mohs surgery and have used Mohs surgery to treat skin cancer patients.

Why remove skin cancers with Mohs surgery?

Some skin cancers are deceptively large - far bigger under the skin than they appear to be from the surface. These cancers may have “roots” in the skin or along blood vessels, nerves, or cartilage. Also, skin cancers that recur after previous treatments may send out extensions deep under the scar tissue that has formed. Mohs surgery is specifically designed to remove these cancers by treating and removing these cancerous “roots”.

How do I prepare for surgery?

- Get a good night’s rest and eat normally the day of surgery. If you are taking prescription medications, continue to take them unless otherwise directed.
- **If you are on Warfarin, Aspirin or another drug to thin your blood or if you have a bleeding disorder:** The Dermatologist who arranged your biopsy will usually have told you if you need to stop this treatment or take other action.

Please remember to bring a list of your medication and your Warfarin record card, if you have one, to show the doctor or nurse who is doing your biopsy. If you are uncertain, phone us on the number overleaf, two weeks before your operation if possible.

- Remove make-up if operation is on your face. You may want to bring a book or magazine with you to occupy your time while waiting for your slides to be processed and examined. Also, you should arrange for someone to drive you home after surgery is completed.
- **Smoking** slows down wound healing and there is a greater risk of wound breakdown or infection if you are a smoker. **If possible try to stop smoking 2 weeks before and until 3 weeks after your biopsy.**

Will I be able to listen to music?

Yes. You may want to bring in either your favourite CD or your I-pod to play. We know that personal choice or music can help to relax you during surgery.

Will I need more than 1 injection?

Yes, the site to be treated is numbed using local anaesthetic injections.

This may cause some discomfort, especially in sensitive areas on the face, but the discomfort is only short lasting. The anaesthetic then lasts for around 2 hours. Top ups of anaesthetic injections may be required during the next stages of surgery.

How is Mohs Surgery Done

There are three steps involved in Mohs surgery

1. The skin is made completely numb using a local anaesthetic. The visible cancer is removed with a thin layer or additional tissue. This takes only a few minutes and the patient may then return to the waiting room. A detailed diagram (a Mohs map) of the removed specimen is drawn.
2. The specimen is colour coded to distinguish top from bottom and left from right. A technician freezes the tissue and removes very thin slices from the entire edge and undersurface. These slices are placed on microscope slides and stained for examination under the microscope. This is the most time consuming part of the procedure, often requiring an hour or more to complete.
3. Dr Fleming or Dr Affleck will then carefully examine these slides under the microscope. This allows examination of the entire surgical margin of the removed tissue.