



## **What is Mohs Micrographic Surgery?**

Mohs Micrographic surgery is a specialised form of surgery which is used to remove certain types of cancerous lesions, in most cases being Basal Cell Carcinomas and Squamous Cell Carcinomas.

## **When is Mohs surgery used?**

Mohs surgery is a gold standard treatment and has a high success rate in completely removing the cancerous lesion and minimising the risk of re-occurrence. The method of the surgery allows for the cancer to be removed whilst preserving the amount of normal skin that is taken away. Mohs is used when;

- The skin cancer is located on the face or in sensitive areas where it is important to preserve as much normal tissue as possible and minimise surgical defect.
- A cancer where it is difficult to see the extent of the lesion with the naked eye.
- Cancers that have re-occurred in the same place after previous treatment.
- Cancers which may tend to spread into deeper tissue and near nerves.

## **Why is Mohs surgery special?**

Mohs is a surgical method whereby the surgeon will inject local anaesthetic and remove the clinically evident cancerous lesion and a small margin of normal skin surrounding it. This tissue is then carefully and specially prepared involving freezing and staining so it can be accurately examined underneath the microscope. Once analysed if any cancerous cells are identified at the edge of the normal skin margin another layer in this area will need to be removed.

This process will continue until no cancerous cells remain. Once the area has been identified as clear the wound can be reconstructed (repaired).

The nature of this method means the extent of surgery required and the type of repair that will be needed to close the wound cannot be determined until the first process of eliminating the cancer has been completed. The surgeon may be able to give some indication of how they plan to repair the wound before they begin depending on the size of the lesion and the location. Occasionally if the repair is more complex, we may have to refer you to a different speciality for the repair including plastic surgery and ophthalmology this is to ensure that best cosmetic results are achieved. If this is the case the repair will be done on a different day and can occasionally be up to a week later depending on availability. We will provide aftercare and education about how to care for your wound and dressing relevant to your repair pathway and will arrange dressing change appointments as required.



1 The visible tumor and a small segment of surrounding skin are removed.



2 The tissue is examined under a microscope to see if any cancer cells remain at any of the edges.



3 If any cancer remains, additional skin continues to be removed and examined under the microscope.



4 This process continues until no more cancer cells are found.

### **What type of repair could I have?**

- **Healing by secondary intention** – This method involves letting the wound heal naturally with dressings. This can be beneficial in certain areas and result in better cosmetic appearance. Although this method will involve being committed to having regular dressing changes for approximately 8- 10 weeks.
- **Direct closure (side to side stitches eg. see picture to the right)** – This method of repair is simple and requires stitches. The skin edges will be stitched directly together. You will be left with a scar, but this will become less visible over time and can sometimes be hidden within a wrinkle line.
- **Skin Graft** – Skin graft involves stitching another piece of skin removed from another area of the body to the wound. This means you will be left with two scars. The graft can take 2-4 weeks to heal. At first the grafted area will appear reddish-purple, but it should fade over time. It can take a year or two for the appearance of the skin to settle down completely. The final colour may be slightly different from the surrounding skin, and the area may be slightly

indented. Also occasionally skin grafts can fail or partially fail, this will mean that the healing process can be delayed and may involve some regular appointments to our dressing clinic.

- **Skin flaps** – Skin flaps is one of the more frequently used type of repair. This involves rotation of adjacent healthy tissue and stitching it to cover the wound. This repair is more favourable as it has excellent cosmetic results and heals well. As flap surgery allows the blood supply to the repaired area to be maintained, there's a lower risk of the repair failing compared with a skin graft.

### **Side effects of Mohs surgery?**

There are potential side effects with any surgical procedure. The most important risks to be aware of and how to manage them are as follows:

- **Bleeding at wound site** – Some bleeding may occur at the wound site. In order to manage this, we advise applying some gauze that you will be provided with after your surgery to the area with firm pressure for 15 minutes, keep the pressure constant for the whole 15 minutes. If bleeding is severe or persists after pressure, contact the dermatology department or A&E if it is out of hours. Also after your procedure it is IMPORTANT that you rest and take it easy for the next 24 to 48 this will also help to prevent post-operative bleeding.
- **Pain** – The anaesthetic will wear off in approximately 1 to 2 hours. The area may be painful and tender also you may experience a headache. Your usual painkiller such as paracetamol should be sufficient in alleviating the pain. We recommend avoiding medication containing aspirin and ibuprofen unless otherwise indicated, as they can increase the risk of bleeding. If on the day of your surgery you experience pain please let one of the Mohs team aware and we can supply painkillers or get a stronger painkiller prescribed.
- **Swelling and bruising** – Swelling and bruising around the site is quite common especially if the surgery was performed around the eyes. This normally subsides after 4-5 days but can persist up to 4 weeks. If you become concerned that the swelling is not reducing, then please contact

the department and we can arrange to see you. Also if your surgery is nearby the eyes you may end up with black eyes.

➤ **Infection** – With all surgery there is the risk of developing an infection.

Signs and symptoms of infection include.

- The skin around the wound gets red, warm to touch and becomes more swollen.
- If the wound has fluid discharge or green or yellow pus oozing from it.
- You generally feel unwell or feverish or have a temperature.

There will be a normal amount of swelling, inflammation and tenderness post-surgery which can be alarming but if you become concerned that you have developed any of symptoms outlined above, please contact the department promptly or your GP surgery it is Important that your wound is assessed and a swab will need to be taken to see if infection is present.

➤ **Nerve damage/ numbness around scar line** – Occasionally nerves can be damaged during the procedure and this can result in altered sensation or numbness in this area for several weeks or months. This feeling is usually only temporary but rarely for some patients this is permanent.

➤ **Scarring** – All surgery results in being left with a scar Every effort will be made to ensure the best cosmetic result is achieved. Scars will generally appear red and sometimes raised for 3-6 months but overtime will gradually become paler and flatter. It is important to understand that some wounds can take up to year to fully heal and settle. It is also important to understand that you may be left with a scar that is much bigger than the cancerous lesion itself. This is because it maybe that even though the lesion was small it may have spread wide and deep meaning that further layers were taken leaving a bigger wound. Also, in order to create a nice flat scar and good cosmetic result the surgeon may have to create a bigger wound in order to bring the skin together.

## Your Mohs appointment

**There is a waiting list this can vary from between 3-6 months**

Our Mohs co-ordinator will be in contact to arrange an appointment and this will follow with an appointment letter and a Mohs pack.

The Mohs pack will include information about how you need to prepare for your surgery and what to expect on the day.

If after reading this information leaflet you still have some questions or any concerns. There are some useful websites listed below but also don't hesitate to contact us on one of the following contacts below.

**Further information can be found at:**

[www.skincancersurgery.co.uk](http://www.skincancersurgery.co.uk)

When entering this site there is a content menu on the left-hand side, there you will find a link to Mohs surgery. On the Mohs surgery page there is also a link to an excellent video of Mohs surgery.

[www.Mohssurgery.org](http://www.Mohssurgery.org)

This is another excellent resource provided by The American Society of Mohs.

**Useful contacts**

- **Mohs Specialist Nurse:** 01603 288224 Ext: 4224 If there is no answer please leave a message. Usual days of work Monday, Tuesday and alternate Wednesdays.
- **Dermatology Day Treatment clinic** (8.30am-5pm Mon-Fri): 01603 288386
- **Plastics Dressing Clinic** (8am – 5pm Mon-Fri): 01603 288014
- **EAUS (Emergency Assessment Unit-Surgical)** Out of Hours/ Weekends /Bank Holidays: 01603 286424
- **Emergency Out of Hours Advice:** Call NHS 111

