

Mohs surgery



Information for patients

Dermatology



PROUD TO MAKE A DIFFERENCE

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST



Why have I been given this leaflet?

You have been given this leaflet because you are going to have a procedure known as Mohs surgery. This leaflet explains more about Mohs surgery and answers some of the most frequently asked questions. If, after reading it, you have any questions or concerns, you should write them down and discuss them at your next appointment. It is important that you understand the procedure, along with the potential benefits and risks, before you agree to it.

Where will my hospital appointments take place?

Your appointments will take place in the Dermatology Outpatients Department at the Royal Hallamshire Hospital.

What is Mohs surgery?

Mohs surgery is a specialised, highly effective technique for removing 'Non-Melanoma Skin Cancers (NMSC)' - mostly basal cell carcinomas ('rodent ulcers') and squamous cell carcinomas. It was developed by Dr Frederick Mohs in the United States, and is now practised throughout the world.

Mohs surgery differs from other skin cancer treatments, in that it allows the immediate and complete microscopic examination of the removed tissue. This means that all roots and extensions of the cancer can be eliminated.

Mohs surgery has the highest reported cure rate of all treatments for NMSCs.

However, treating all skin cancers with Mohs surgery is not necessary. Mohs surgery is reserved for certain skin cancers such as those that have grown back after previous treatment, cancers that are at high risk of recurring, or cancers that are located in important cosmetic areas,

where preservation of the maximum amount of normal skin is important. Examples are on or around the nose, lips, ears or eyes.

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 tracking and removing these cancerous 'roots'.

Are there any alternative treatments to Mohs surgery?

Alternative treatments, such as surgical excision or radiotherapy will have already been considered and discussed with you. Mohs surgery gives the best cure rates (97-99%) for the most difficult skin cancers, so if it is felt to be the most appropriate treatment for you, other treatments may not be as beneficial to you. If in doubt, please do not hesitate to speak with your doctor or one of the nurse practitioners.

Will I need any tests first?

You will usually be seen by one of our nurse practitioners in the pre-assessment clinic 2-4 weeks before the procedure. They will check your blood pressure and pulse, and also take some swabs from your nose, groin and lesion.

Before your procedure

One of your medical team and /or the nurse practitioners will discuss the procedure, along with the risks, benefits and alternatives before you sign the consent form. This form confirms that you agree to have the procedure and understand what it involves.

How do I prepare for surgery?

We advise that you get a good nights rest before your surgery. You can eat and drink as normal on the morning of your surgery. If you are taking any prescription medications, continue to take them, unless otherwise directed. However, if you are taking any of the medicines or herbal preparations listed below, please let us know. These preparations will make you bleed more during and after the surgery. In some circumstances we may ask you to stop them before the procedure, but you will be advised of this - please do not stop unless asked to do so.

- Aspirin
- Clopidogrel (Plavix)
- Warfarin
- Non Steroidal Anti Inflammatory Drugs (NSAIDS) - such as brufen (ibuprofen), voltarol (diclofenac) or naproxen
- Ginger
- Gingko
- Garlic remedies

If the operation is on your face, and you wear spectacles / contact lenses, please bring these with you. The dressing may prevent you wearing your spectacles initially. You are welcome to bring one friend or relative with you and you may also want to bring a book or magazine with you to occupy your time while waiting for your slides to be processed and examined. We have facilities for hot drinks throughout the day. You will also need to ask someone to drive you home after your surgery is completed.

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, along with a thin layer of additional tissue. This usually takes 30 - 60 minutes, and you will then be asked to sit in the recovery area. 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. The tissue is frozen and a technician produces very thin slices from it to enable the edges (margins) to be examined. These slices are placed on microscopic slides and stained, for examination under the microscope. This is a time consuming part of the procedure, often taking an hour or more to complete.
3. The slides are then carefully examined. Small roots of the cancer can be identified and located on the Mohs map. If more cancer is found on the microscopic slides, the Mohs map is used to remove additional tissue only where cancer is present. This allows the Mohs surgery techniques to leave the smallest possible surgical defect, because no guess work is involved in deciding where to remove additional tissue.

How long does it take?

Most cases can be completed in three or fewer stages, taking less than six hours. However, no one can predict how extensive a cancer will be, because the site of a skin cancer's 'roots' cannot be estimated in advance. We therefore ask that you reserve the entire day for surgery, in case additional surgical sessions are required.

What usually happens after the Mohs surgery is completed?

When the cancer is removed, there may be a number of ways of repairing the wound.

These may include:

1. Allowing the wound to heal naturally, without additional surgery
2. Using a skin graft or skin flap wound repair
3. Wound repair by the referring doctor
4. Referral to another surgeon for wound closure

After the operation, a dressing will be applied over the wound. This may be quite large and bulky, and a head bandage may also be necessary.

Are there any risks or complications?

Pain

Most patients do not complain of significant pain. If you do feel any discomfort once the anaesthetic wears off, we recommend that you take paracetamol.

Bruising / swelling

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

Bleeding

Any bleeding from the wound will have stopped before you leave the department. You will be told what to do if bleeding occurs once at home - this is rare. Generally you will apply pressure to the wound and follow the specific post-op wound care advice (see separate booklet).

Wound infection

Signs of a wound infection are increasing pain at the wound site, redness, swelling and discharge from the wound. Should any of these symptoms occur, please contact us as soon as possible on the telephone numbers provided at the end of this booklet.

Wound opening

This is rare, but if you are worried your wound is starting to open up or gape, please contact us.

Nerve damage

Nerve damage is usually temporary. However, if the cancer has invaded the surrounding nerves, nerve damage might be permanent.

Scarring

Any form of surgery leaves a scar. Mohs surgery, however, will remove only cancerous tissue, and therefore usually leaves a smaller scar, compared with normal surgery. The scars do tend to improve with time. This can take up to one year.

What happens after I have gone home?

Even though the operation is performed under a local anaesthetic, you may feel quite tired afterwards. You should plan to rest for the next few days. You should refer to the post-operative wound care booklet for other advice on looking after yourself when you get home.

Will I need to come back to hospital?

Specific information regarding any follow up visits will be given to you after your surgery. You will usually be seen in our dressings clinic 1 week after surgery. Your wound will be checked and any stitches removed. You will also be asked to return to see the consultant in 3-4 months time.

Is there anything I can do to help myself?

If you smoke, you should avoid smoking for at least 3-4 days after your surgery, as smoking slows down the wound healing process. Also, try and avoid alcohol for 3-4 days, as this can make your wound bleed more.

What if I think there is something wrong when I get home?

We have a telephone helpline service: **0114 271 2018**

This is a 24 hour answering machine, which is checked several times a day (Mon - Fri 8.00am - 5.30pm).

Out of hours: please use the Emergency GP services, Minor Injuries Unit or Accident and Emergency Department. They will be able to contact the Dermatology On-Call Service for advice.

How is my information used?

It is routine practice in the NHS and healthcare organisations to collect the details of operations and complications. This is done to improve the safety and effectiveness of surgery.

Mohs surgeons record these details in a logbook provided by the British Society for Dermatological Surgery (BSDS). You cannot be identified directly from the details collected in the logbook (your name isn't used) but your NHS number and date of birth are recorded. This information is only needed to make sure we can add the longer term results of your surgery to the correct record.

What do I do if I don't want these details recorded?

We hope you will agree to this to help us improve future patient care. However, if you prefer not to then please tell your surgeon at the time of surgery so that it can be documented in your patient notes.

Please visit this link for further details

<https://www.bsds.org.uk/resources/surgery-log-books>

Where can I find out more about Mohs surgery?

Please refer to the following two approved websites:

The British Association of Dermatologists

- **www.bad.org.uk**

New Zealand Association of Dermatologists

- **www.dermnetnz.org**



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