

# MOHS SURGERY- PATIENT INFORMATION

## WHAT IS MOHS SURGERY?

Mohs Surgery is a highly specialised procedure aimed at total removal of skin cancer while minimizing the amount of normal skin removed in the process. It is most commonly used to treat basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) on the head and neck but is also used in some less common skin cancers and occasionally for more difficult skin cancers elsewhere on the body.

The name Mohs is from the originator of the procedure (Dr Frederic Mohs) who developed this technique in the 1930s. Mohs surgery is almost exclusively performed by Dermatologists that have subspecialised in this procedure.

## THE MOHS SURGERY PROCEDURE

The steps in Mohs Surgery are:

1. Removal of the visible portion of the skin cancer and a thin layer of normal-appearing skin around it, using local anaesthesia.
2. Careful mapping and dyeing of the excised skin and preparation of this tissue for microscopic examination on glass slides.
3. Examination of these slides under the microscope and marking the exact location of any remaining tumour on the map.
4. If any residual cancer is detected then the process is repeated, removing a further layer of tissue only at the site of the remaining cancer.

Once the tumour is gone, repair of the resulting defect will then be undertaken – usually on the same day (see page 3 of this Information Sheet).

## HOW IS MOHS SURGERY DIFFERENT TO STANDARD SURGERY?

Mohs surgery differs from standard surgery in having the results immediately available rather than waiting for a few days. Also, there is a smaller amount of normal-looking skin tissue around the cancer which is initially taken in step 1.

The 2 great advantages of this technique are:

1. A higher cure rate. Complete eradication of the skin cancer is usually possible, even in the most difficult and recurrent forms of skin cancer.
2. Preservation of as much normal tissue as possible while still retaining a high cure rate.

## THE MOHS SURGERY TEAM:

Because this is a highly specialised procedure, it requires personnel trained in the various techniques necessary for success. Your Dermatologist has completed a Medical degree, Specialist Dermatology training & then a Fellowship in Mohs Surgery.

- Prof Shyamala Huilgol undertook her Mohs Fellowship in Vancouver, Canada with Drs' Alastair Carruthers, Larry Warshawski & David Zloty. Subsequently, she worked at St Thomas' Hospital in London performing Mohs Surgery.
- Dr Todd Wiadrowski completed a Fellowship in Mohs Micrographic Surgery in Perth with Drs' Carl Vinciullo and Tim Elliott. He also gained skills & experience in a wide range of cosmetic and laser treatments during this time.

Other members of the team include nursing assistants experienced in working with skin cancer, a laboratory technician who prepares the tissue for microscopic examination and the office staff.

At present there are a limited number of centres in Australia with the personnel and training able to offer this treatment.

For more information regarding Mohs surgery visit the following website – [www.mohscollege.org](http://www.mohscollege.org)

# PREPARING FOR MOHS SURGERY- PATIENT INFORMATION

## **THE PREOPERATIVE VISIT:**

This consultation allows us the opportunity to examine your skin cancer, obtain your medical history and determine the most suitable way of treating your skin cancer. It also gives you the opportunity to learn about the proposed procedure. Since all skin cancers are not the same, we need to know exactly what type you have before proceeding to definitive treatment. A skin biopsy or small sample of the skin cancer may therefore be required.

The costs associated with your surgery will be discussed with you during this visit. We are a Registered Day Surgery. If you have Private Hospital Insurance, the majority of your costs will be covered- you will only need to pay your excess and your doctor's gap fee. For patients without insurance, we will provide you with an estimate of the two costs- the Day Surgery theatre fee and Doctor's fees.

## **WILL I BE ADMITTED TO HOSPITAL?**

One of the advantages of Mohs Surgery is that it is performed as an inpatient procedure in our Day Surgery. Occasionally overnight admission to hospital is required – if this is considered necessary, we will discuss this with you at the preoperative visit.

## **GETTING READY FOR MOHS SURGERY:**

Our staff will call you 24 – 48 hours before the time of your surgery to confirm your appointment. Try to get a good night's rest, eat a good breakfast and take your regular medications (unless otherwise instructed). It is a good idea to wash your hair before the surgery. Please do not wear makeup if the planned surgery is on the face. The theatres are usually quite cool so please wear warm, comfortable clothes or jewellery which will not have to be pulled over your head after the operation. If your surgery is around the mouth, be prepared to eat soft foods for 2-3 days after the surgery.

## **BEFORE SURGERY:**

Please inform us if you take medications which increase bleeding e.g. Aspirin, Clopidogrel (Plavix, Iscover), Warfarin, Eliquis, Xarelto as we may need to stop them or reduce dosage prior to surgery. Anti-inflammatory medications e.g. Nurofen increase bleeding, so please stop 3 days before surgery. Please take paracetamol (& codeine) preparations if you require pain relief in this preoperative period.

Alcohol aggravates bleeding so please avoid alcoholic drinks for 24 hours prior to and after surgery. Smoking reduces blood flow to the skin, slows healing and increases the risk of flap and graft failure. Please stop smoking at least 3 days prior to surgery and for two weeks afterwards.

The procedure may take several hours, much of which will be spent waiting for results. As the theatre may be cool, please bring a warm, soft jumper or coat. We do have blankets available should you need one. It is a good idea to bring a book or magazine with you on the day of surgery. As you may be here for an extended period, we recommend bringing some food eg sandwich with you; tea and coffee will be provided. A car park permit is available to all surgical patients & this car park is located underneath the ASEC building.

Please complete and return your Patient Admission Form as soon as possible to confirm your admission for day surgery and also to confirm your financial responsibilities prior to your admission.

If you live in the country, we suggest staying in Adelaide for 1-2 days post surgery and we may wish to check your wound before returning home.

## **THE DAY OF SURGERY:**

As the total procedure may take several hours, appointments are made in the early morning or afternoon. When you arrive for surgery you will be taken to the operating theatre. Our nurse will confirm your name and the procedure, check your medical history and allergies from the form you have filled in, take your pulse, temperature and blood pressure and have you remove appropriate clothing. Your signed consent for the operation will be obtained.

We will outline the area to be excised. Your skin cancer may be photographed – both before and after treatment. These photos become part of your medical record & may be used for teaching purposes. The local anaesthetic will then be administered—you should experience no more than mild discomfort. A few minutes are allowed for the local anaesthetic to work during which time the nurse will apply an earthing pad to your body and prepare the operation area.

The tissue is then removed and taken to the laboratory. Any bleeding is stopped using electrical cautery with suction and the nurse will apply a dressing to the wound.

It normally takes between 20 & 30 minutes to anaesthetise the involved area & remove the tissue. It will take approximately one hour to process the tissue & examine it under the microscope. If there are any areas where cancer is still present, the procedure will be repeated. The average number of surgical sessions for successful removal of most cancers is between 1 and 3.

The local anaesthetic contains a very small amount of adrenalin to reduce bleeding during the operation. Sometimes it can make your heart beat a little faster or your hands shake for 10–15 mins before settling. Lollies may help reduce this problem.

## **REPAIR OF THE WOUND:**

After the skin cancer has been completely removed, we will discuss with you the best method for repairing the wound.

This may involve:

1. Closing the wound with a skin graft or flap.
2. Closing the wound with a straight line of stitches.
3. Letting the wound heal by itself.

Such repairs may be done by us or by other surgical specialists. Each patient is unique and we will work with you to achieve the best possible result.

## **POSTOPERATIVE CARE & RESULTS:**

We will explain exactly how you should care for your wound before you leave and give you an appointment for follow up care and suture removal. Once the wound is repaired, you will feel some tightness in the area for the first 24 or 48 hours. You are likely to have some **bruising and swelling** – how much you experience may vary according to the area. It is most marked when surgery is done near or above the eyes and is usually worst two days after the surgery. Most of the swelling resolves by one week.

Restriction of physical activity is advised until sutures are removed, but especially in the first 24 - 48 hours post-op.

Skin cancer surgery frequently damages nerves and you may experience a sensation of numbness around the wound. This will usually return slowly to normal over a period of 6 to 12 months, though occasionally the numbness may be permanent. Any form of skin surgery will leave a scar. Because Mohs surgery preserves as much normal tissue as possible, scar formation is kept to a minimum & we will make every effort to provide as good a cosmetic result as possible.

## **FOLLOW UP AFTER MOHS MICROGRAPHIC SURGERY:**

A minimum follow up period of 5 years is recommended. This is because studies have shown that if you develop one skin cancer, there is a possibility that others will develop in the years ahead. We also like to have the treated area checked to make certain there is no sign of recurrence of the treated skin cancer. This follow up is usually carried out by your referring Doctor or Dermatologist. We will discuss the appropriate follow up suitable for your particular case. Should you notice any suspicious areas on your skin, you should of course have them checked by your doctor.