

MOHS MICROGRAPHIC SURGERY

“Complete tumour removal, 99% cure rate and optimal cosmetic result”

WHAT IS MOHS MICROGRAPHIC SURGERY?

Mohs Micrographic Surgery is the most advanced and effective treatment for skin cancer available. It has a **proven cure rate of 99%**, far superior to any other form of skin cancer treatment.

Mohs Surgery is a highly specialized procedure which ensures **complete tumour removal** and **maximizes tissue conservation**, thereby minimizing scarring and ensuring the **optimal** post surgical **cosmetic result**.

Mohs surgery is the **treatment of choice** for **tumours on the face** and other sensitive areas, especially cosmetically and functionally important anatomical sites.

Furthermore, it is the treatment of choice for **‘high risk’ tumours** such as those which have failed prior treatment, or demonstrate aggressive histopathological features under the microscope. In this group of cancers traditional surgical cure rates may fall to 60% compared with Mohs Surgery.

Mohs surgery is performed by highly trained specialist surgeons who have completed training as both specialist dermatologists with the **Australasian College of Dermatologists** and as Mohs Surgeons with the **American College of Mohs Surgery**. A Mohs Surgeon is specially trained in surgery, pathology and optimal functional and cosmetic reconstruction.

Initially developed by Dr Frederic E. Mohs, Mohs Micrographic Surgery is a state of the art treatment that has been continuously refined over 70 years.

Dr Banky will precisely analyze and detect all tumour extensions employing a **specialized microscopic technique**. This allows your specialist to in effect ‘see beyond the visible disease’. Tumour extensions are exactly mapped out and removed layer-by-layer, down to the roots, until **complete tumour eradication is confirmed** under the microscope. The surrounding normal healthy tissue is left intact and unharmed. As the most intact and precise method of tumour removal (99% cure rate), Mohs Surgery minimizes the chance of tumour re-growth and lessens the potential for scarring and disfigurement.

Unlike other forms of skin cancer surgery, Mohs Surgery ensures tumour removal, tumour analysis, and surgical reconstruction at the one treatment session.

WHY DOES MY SKIN CANCER NEED MOHS SURGERY?

Mohs Micrographic Surgery is primarily used to treat basal cell carcinomas (BCCs), squamous cell carcinomas in situ (SCCIS) and squamous cell carcinomas (SCCs) on the head and neck area, but may be used to treat less common tumours including Merkel Cell Carcinoma, Atypical Fibrous Xanthoma and Melanoma.

MOHS SURGERY IS RECOMMENDED WHEN THE CANCER:

- Is in a **critical site** where it is important to preserve healthy tissue for maximum functional and cosmetic results: nose, lips, eyelids, ears, fingers, toes, genitals, neck. BCCs and SCCs are also known to behave more aggressively and spread further under the skin at these sites.
- Was **treated or excised** previously but returned (recurrent tumours)
- Is located **near scar** tissue
- Is **large**
- Margins are **not clearly defined** visually or palpably
- Is **growing rapidly** or uncontrollably
- Demonstrates **‘aggressive’** features on the biopsy analysis

Because the Mohs Micrographic Surgery process is a systematic microscopic search that traces skin cancer to its roots, it offers the highest chance for complete removal of the tumour while sparing the normal tissue surrounding it.

Clinical studies conducted at various national and international medical institutions – including the Mayo Clinic, the University of Miami School of Medicine and Royal Perth Hospital in Australia – demonstrates that Mohs surgery provides 5-year cure rates exceeding 99 % for new cancers and 95% for recurrent cancers.

HOW DOES MOHS SURGERY WORK?

A microscope will be used to allow Dr Banky to ensure complete removal of your skin cancer.

There are 2 great advantages to this technique:

1. Complete eradication of the skin cancer, ensuring a very high cure rate of greater than 99% for even the most difficult and aggressive forms of skin cancer.
2. Preservation of as much normal tissue as possible, without compromising the high cure rate.

There are 5 key steps to Mohs Micrographic Surgery

1. Removal of the clinically apparent/visible skin cancer.
2. Precise marking and mapping of the excised tissue layer and preparation for microscope analysis.
3. Microscope guided detection of all tumour extensions.
4. Precise removal of any residual tumour - unnecessary tissue sacrifice is carefully avoided.
5. Expert reconstruction of the microscopically controlled tumour free defect; ensuring an optimal and functional outcome.

WHAT HAPPENS AT MY PREOPERATIVE VISIT?

Dr Banky will obtain a full medical history, to ensure that all treatment is tailored to your specific circumstances and state of health. This is also an opportunity for you to learn about the proposed procedure.

It is important that you bring a full list of all your current medications (prescriptions and herbal) and notify Dr Banky and his staff regarding any allergies to drugs or latex. Inform staff if you have a pacemaker or defibrillator. Inform staff of any bleeding tendencies, or heart valve disease.

Dr Banky will then examine the areas of interest. A skin biopsy of your cancer is often performed, if not already done by your referring doctor. This confirms that your cancer is suitable for Mohs Surgery and guides Dr Banky's surgical approach on the day of the Mohs surgery.

The costs associated with your surgery will be discussed at this visit.

WILL I BE ADMITTED TO HOSPITAL?

One of the advantages of Mohs Surgery is that it is an outpatient procedure, performed under local anaesthesia. Admission to hospital is rarely indicated and this would be discussed at the time if necessary.

HOW LONG WILL MOHS SURGERY TAKE?

The time taken to complete Mohs surgery is unpredictable. Each individual cancer behaves differently.

In general, each 'stage' of Mohs surgery (process of cutting out the tumour and analyzing the edges under the microscope) takes >1hr. It is best that you bring a book or magazines to occupy you during this time.

For your own safety you are not permitted to leave the recovery area until the Mohs Surgery is completed.

33% of cancers are cleared with one stage of Mohs Surgery. The vast majority will be cleared on the second stage. Only approximately 10% of cases require 3 or more stages.

Once your cancer has been completely removed, Dr Banky will discuss the various options of repair of the resulting skin defect with you. These may include side to side suturing, a flap, graft or in some instances spontaneous wound healing under a dressing ('secondary intention' healing).

WHAT DO I DO BEFORE MY SURGERY?

- Dr Banky's staff will contact you 24-48 hours before the time of surgery to confirm your appointment.
- Please try to get a good night's rest, eat a good breakfast and take all of your regular medications (unless otherwise directed) on the morning of surgery.
- Anticoagulant medications such as Warfarin or Aspirin are not routinely stopped prior to surgery (unless otherwise instructed).
- It is a good idea to shower and wash your hair on the morning of the surgery – you may leave with a heavy dressing that you may not be allowed to remove or get wet.
- Please do not wear makeup or moisturizers at the site of your surgery.
- If the surgery is planned around the mouth, be prepared to eat soft foods for 2-3 days after the surgery.
- Wear comfortable clothing that allows easy access to the treatment area. A shirt/blouse that opens down the front is ideal, so it does not need to be pulled over your head.
- Alcohol should be avoided for at least 48 hours before and after surgery as it may cause bleeding and increase bruising.
- Smoking impairs healing and encourages tumour growth and infection. It is strongly advised that you cease smoking, especially 3 days prior to the surgery and until sutures are removed.
- Do not drive yourself to the surgery. Arrange for someone to drop you off and pick you up from the day theatre. You will not be able to drive safely after the procedure.
- Company through the day may help you relax, but please limit this to one person given the limited space in the recovery area.
- If you live alone, it is best if you stay with someone on the night after the surgery in case you need any help with the dressing or any other problems.
- Country patients are advised to stay in Melbourne for at least 24 hours after surgery.
- Purchase any recommended medications, ice packs and dressings prior to the day of surgery – so that you do not have to make any special trips on the day of the surgery.
- Do not expect to return to work on the day of surgery and make other arrangements for the next day. You may require several days off work and Dr Banky will discuss this with you.

WHAT DO I HAVE TO DO AFTER MY SURGERY?

- The nurses will dress your wound and give you specific instructions regarding wound care. You will also be given written information regarding the post-operative wound care technique.
- You will be given an appointment for review of your healing wound and removal of sutures.
- Once your wound is repaired, you may feel some tightness in the area for the first 48 hours. This is normal as the skin adjusts to its normal position.
- Some bruising and swelling is to be expected, but will settle over a few days. The nurse will advise on how to minimize this.
- It is important to limit physical activity to a minimum after surgery, at least until removal of sutures.

- Effective skin cancer surgery often necessitates sacrifice of sensory nerves and rarely of motor nerves. You may therefore experience some numbness or weakness near the wound. This usually settles in 6-12 months, but in some cases is permanent.
- Regular skin checks with Dr Banky or your referring local doctor are recommended following Mohs Surgery to screen for new cancers and rare tumour recurrences (<1% cases).
- Ongoing strict sun protection measures are strongly advised.
- Discuss any queries or concerns with your Dr Banky or his staff.

IS MOHS COVERED BY MY HEALTH INSURANCE?

Private health funds will usually cover the cost of Mohs surgery and associated theatre fees. Please remember that some policies do have an excess or co-payment that you will need to pay to the hospital. Consultation fees are not covered by private health insurance due to government regulations.

Full financial consent will be obtained before the procedure. Please ensure you fully understand all your costs associated with treatment, and feel free to ask the staff any questions.

THE MOHS SURGERY TEAM:

Dr Jeremy P Banky. MBBS (Hons), FACD:

Dr Banky is a dermatologist. He graduated from Medicine at Monash University. He is a Fellow of the Australasian College of Dermatologists and a member of the American College of Mohs Surgery.

Dr Banky trained as a specialist in dermatology in both Australia and the United Kingdom where he spent a year at The John Radcliffe Hospital in Oxford after being awarded a traveling fellowship. He completed a fellowship in Mohs Micrographic Surgery, cosmetic surgery and laser surgery accredited by the American College of Mohs Surgery.

Dr Banky is actively involved in research and has presented at national and international scientific meetings. He has published in the national and international medical literature and is a reviewer for the Australasian Journal of Dermatology. During his dermatology training, he was awarded the 'Schering-Plough Award' by the Australasian College of Dermatologists for his research on melanomas and naevi (moles) published in the international medical literature.

Dr Banky is one of only a handful of dedicated dermatologists performing Mohs Micrographic Surgery in Melbourne

Dr Banky's areas of special expertise include:

- General dermatology
- Surgical and non-surgical management of skin cancers
- Cosmetic dermatology
- Mohs Micrographic Surgery
- Acne and treatments for acne scarring
- Laser and light skin therapy

Other important team members of the Mohs Surgery Unit include specially trained registered nurses, histotechnicians who aid in the processing of tissue for tumour analysis and our administrative support team. Certain cases may have surgical assistant helping Dr Banky.

At present there are only a few centres Australia wide with the personnel and training necessary to provide this state of the art treatment. Dr Jeremy Banky delivers this important service at Masada Hospital – a fully accredited Private Hospital and Day Surgery Facility.

FOR MORE INFORMATION:

- For more information regarding *Mohs Micrographic Surgery* please visit the American College of Mohs Surgery website at www.mohscollege.org
- For more information regarding *Dermatology* please visit the Australasian College of Dermatologists website at www.dermcoll.asn.au