Mohs micrographic surgery

Also known as Mohs or Mohs' surgery

What is Mohs micrographic surgery?

Mohs micrographic surgery is an advanced technique that ensures complete removal of skin cancers with minimal loss of surrounding tissue. It was originally developed in the USA by Dr Frederick Mohs in the early 1940s. It involves removal and comprehensive analysis and mapping of excised tumour tissue under the microscope, in order to determine the exact nature and extent of the tumour. Mohs surgery delivers the highest cure rate of all methods of skin cancer removal (over 95%).
In Australia, Mohs micrographic surgery is performed by an accredited Mohs surgeon. To become a Mohs surgeon, an FACD qualified specialist dermatologist must undertake an additional one to two years of intensive specialist training and meet specific requirements. A list of accredited Mohs surgeons can be found at the Australasian College of Dermatologists website. Mohs surgeons must engage in ongoing quality assurance activities to maintain their accreditation.
In addition to the Mohs surgeon, a specialised team is involved in patient care, including doctors, nurses and laboratory staff.

What are the benefits of Mohs micrographic surgery?

The tumour is completely removed with minimal loss of normal surrounding tissue, leaving the smallest possible defect and ensuring a better cosmetic result
Mohs has the highest cure rate of all methods of skin cancer removal (over 95%)

When is Mohs micrographic surgery performed?

The tumour is in a critical position and/or where tissue preservation is vital
The tumour has recurred after previous treatment
The tumour is ill-defined
The tumour is of an aggressive subtype
The tumour is very large.

What does Mohs micrographic surgery involve?

Mohs is routinely performed under local anaesthetic. It is a multi-stage procedure with each "Mohs stage" taking approximately 1 hour (although this is an estimate and the time can vary). A Mohs stage involves removal and comprehensive analysis of suspect tissue.

How is Mohs surgery different from routine skin surgery?

The tissue is processed in a different way from routine skin surgery
As close to 100% as possible of the cut margin of the excised tissue is examined under the microscope to ensure that this is fully clear of residual tumour. On the other hand, traditional skin surgery analysis looks at less than 3% of the cut margin
If present, the precise location of residual tumour cells is mapped to guide their exact further removal
Further stages are undertaken until all tumour cells are completely removed
The wound is then carefully repaired

What are the risks of Mohs micrographic surgery?

The risks of Mohs surgery are similar to the risks of any other general surgery and may include:

- pain
- bleeding and bruising
- infection
- scarring
- recurrence of tumour
- nerve damage.