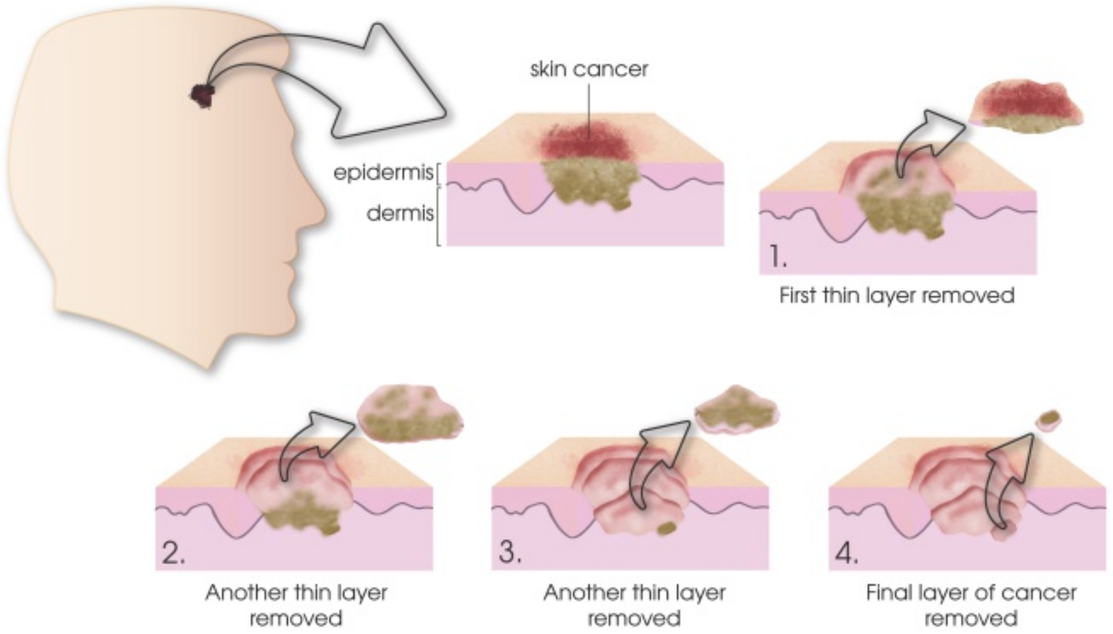
SKINMATTERS

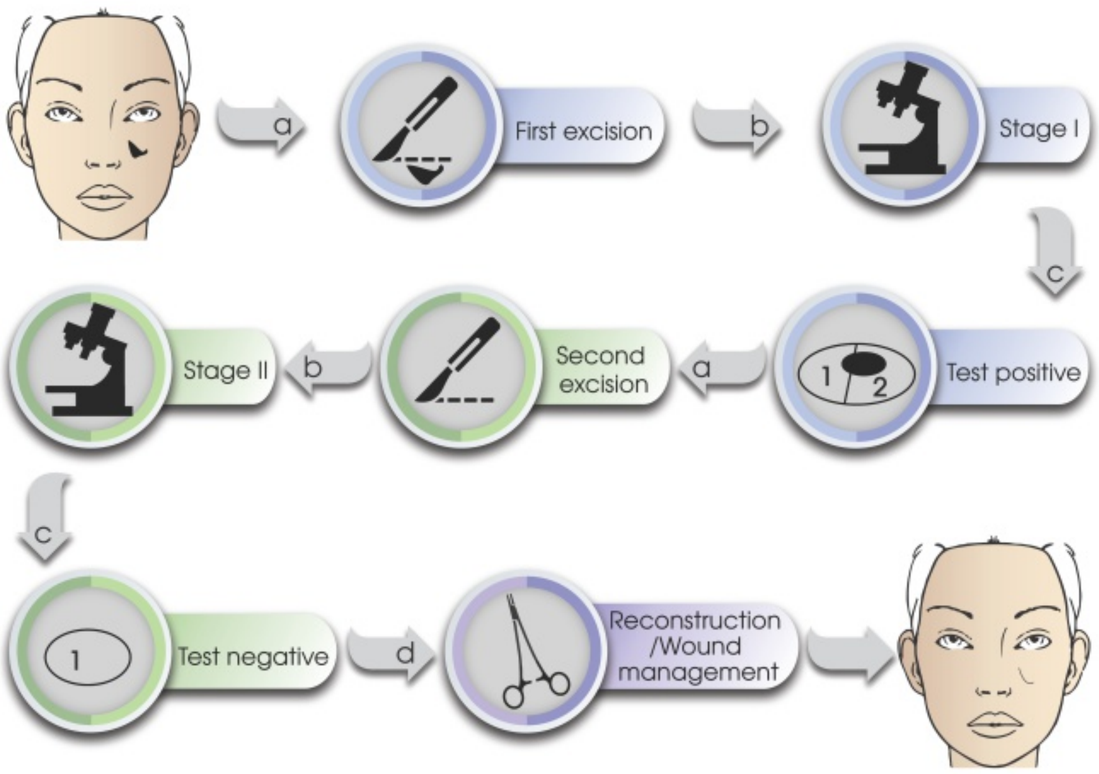
Mohs and Reconstruction Unit

The Club Surgical Centre in Hazelwood, Pretoria, is the home of the Skinmatters Mohs and Reconstruction Unit, where a team of dedicated specicalists are focussed on the optimal treatment of skin cancer.



There is an epidemic of skin cancer in the world, and South Africa is no exception. Although the most dangerous skin cancer is malignant melanoma, the most common ones are known as basal cell carcinoma and squamous cell carcinoma, collectively known as non-melanoma skin cancer (NMSC).

The Gold Standard surgical method worldwide for the most effective removal of skin cancer is a technique called Mohs Surgery. ("Mohs" refers to the surname of the doctor who first practised it). With this technique, performed in most cases under a local anaesthetic, the tumor is removed with a thin layer of surrounding healthy tissue. The removed tissue is then processed immediately by the Mohs surgeon (a dermatologist specially trained in Mohs micrographic surgery) in a Mohs histological laboratory on site, while the patient returns to the ward.



The specific method of processing allows tissue slides to be produced that shows the whole, complete cut surface around the tumor. Theses slides are then examined by the Mohs surgeon and will show very accurately any remaining tumour, including the exact area on the tumour wound where tumour is still present.

The patient then returns to the day theatre and the process is repeated, but only on the area of remaining tumour, leaving the healthy tumour-free part of the wound alone. As soon as the Mohs surgery confirms the skin cancer to be completely removed, a specialist reconstructive surgeon or the Mohs surgeon repairs the defect where the cancer was removed, almost always on the same day.

Mohs Micrographic Surgery is not required for the treatment of every skin cancer. Patients are seen for Mohs surgery by referral only.

The Skinmatters Mohs and Reconstruction Unit functions as an extension of the referring practices. Referring practitioners successfully diagnose and treat the majority of skin cancers with the appropriate methods at their disposal, know the indications and criteria for Mohs Micrographic Surgery, and which patients to refer for this procedure.

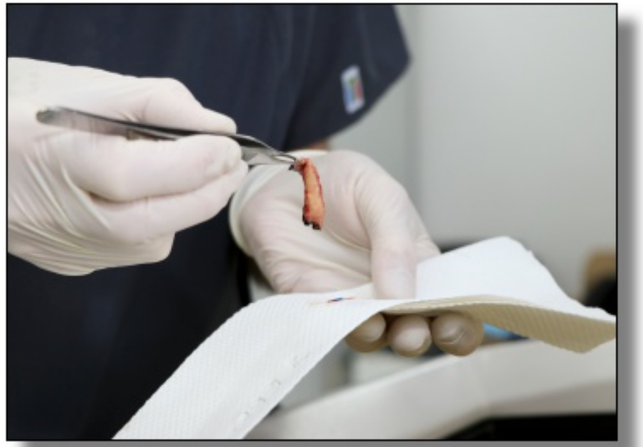
Following successful Mohs Micrographic Surgery, all patients are referred back to the original referring practice, for subsequent follow-up and management of future skin disease.

Mohs Micrographic Surgery by the Skinmatters Mohs and Reconstruction Unit is performed at the Club Surgical Centre, where the patient arrives on the day scheduled for the procedure.

Admission to the day hospital is efficient and friendly.

Day ward sisters and staff take care of patient needs during the day.

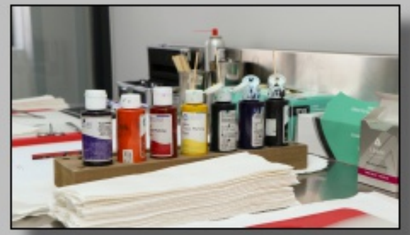
The skin cancer is excised with the Mohs technique under a local anaesthetic.
The patient returns to the ward following the excision.



While the patient returns to the ward, the excised tissue is taken to the Mohs Micrographic Surgery laboratory, on site, where the tissue is mapped and prepared for processing by the Mohs laboratory staff.

A tissue block is embedded in cryogel ready for freezing. Freezing of the tissue block takes place using specialised equipment called a cryostat.

A frozen tissue block is cut into thin wafers by the histotechnologist in the cryostat.

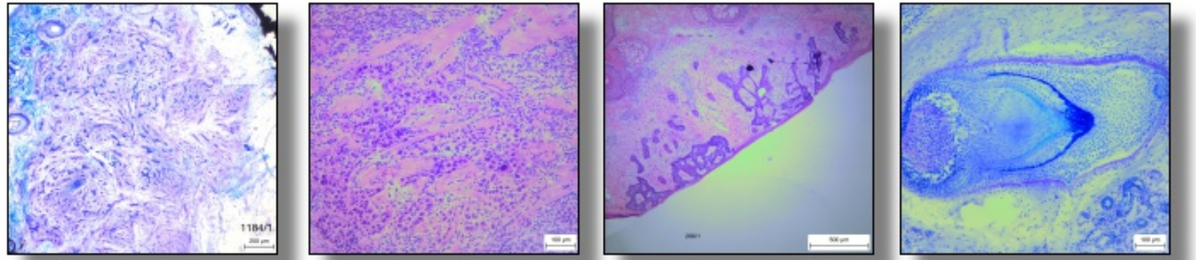


Glass slides containing tissue wafers are stained with tissue staining dyes, to prepare them for histological examination.

The complete histology slides are presented with the map of the defect to be examined microscopically.

The entire cut surface around the skin cancer is examined microscopically for any remaining tumour. It is this ability that makes Mohs micrographic surgery the most accurate method of removing skin cancer, provides the highest cure rate of any method and distinguish the procedure from any other surgical, medical or radio-therapeutic option.

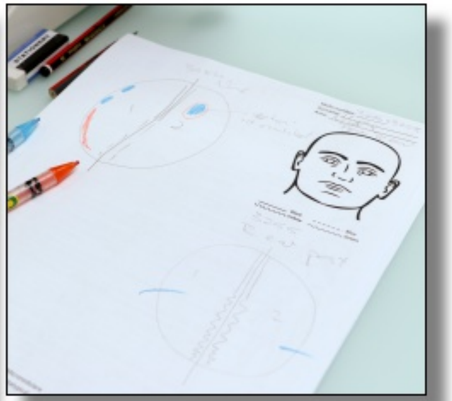
Any remaining tumour found is mapped out on the Mohs map.



If tumour was found, the patient returns to the procedure room for a next stage of the excision, still under local anaesthesia. Only tissue containing tumour is removed with subsequent stages, clear areas are left alone, thereby limiting the size of the defect to the smallest possible, while achieving total clearance of the tumour.

With the patient again returning to the ward, the next stage is processed, mapped and the histology slides are prepared. This process is repeated until all the tumour is removed.

Once the microscopic examination finds all cut surfaces to be clear of tumour, the Mohs Micrographic Surgery is completed.



The final phase of the treatment, is closure of the defect. Due to the extent and location of these complicated tumours, the defect closure is usually performed by a specialist reconstructive surgeon, on the same day. However, if circumstances permit, the Mohs surgeon or referring specialist may elect to perform the closure.

The actual defect is evaluated and the patient prepared for the reconstructive phase. A professional nursing sister assists with the preparation and discuss the reconstructive process, recovery and post-operative care in detail with the patient.

Very commonly the reconstruction is more extensive than the excision. This may necessitate a form of sedation or anaesthetic to facilitate a comfortable procedure, administered by a specialist anaesthetist and based on the patient's medical condition, the site and extent of the defect.

Most defects are reconstructed utilizing tissue from the vicinity. Tissue with similar appearance is usually harvested, with it's underlying blood supply. These tissue blocks are called tissue flaps.
The donor area and movement of these tissue blocks are precisely planned to coincide with natural shadow lines. This minimizes unsightly scars and facilitate the ultimate aesthetic result.

After closure with tissue flaps, there will always be some swelling and bruising, combined with a degree of distortion of the surrounding tissues. This settles within a fairly short period. Rarely secondary procedures might be necessary to optimize the cosmetic appearance of these flaps.

Once the sutures are removed, the scars are slightly pink. The maturation process takes a couple of months but once the scars fade away they are, as a general rule, quite inconspicious.

Other closure methods such as skin grafts are also sometimes used in the descretion of the reconstructive surgeon. 90% of patients have a single stage reconstruction, are discharged on the same day and have an exceptional cosmetic result.

In summary, Mohs Micrographic Surgery and Reconstruction for indicated skin cancers, is a one day procedure for patients performed by a team of specialists and in the vast majority of cases, curing the skin cancer.

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