

Skin Cancer – Diagnosis and Treatment

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Skin cancer is the most common type of cancer and is a growing public health concern worldwide. South Africa has the second highest incidence of skin cancer in the world after Australia.

The 3 most common types are:

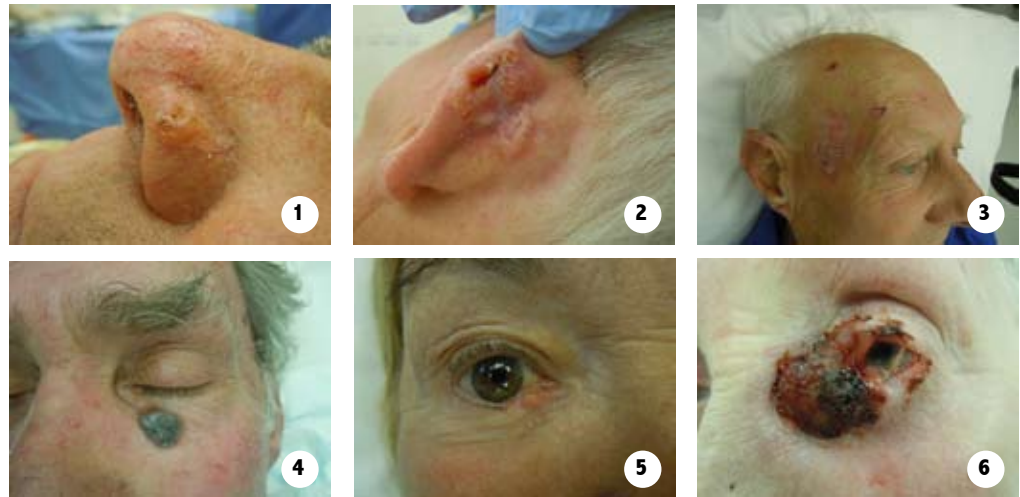
- basal cell carcinoma (BCC)
- squamous cell carcinoma (SCC)
- melanoma

BCCs and SCCs are often referred to as non-melanoma skin cancers and account for 95% of skin cancers. While SCCs do have a risk of spreading, it is melanoma which has a poorer prognosis and accounts for mortality due to skin cancer. Melanoma is fortunately less common than non-melanoma skin cancers. Early diagnosis is the key to a successful treatment outcome. This article aims to highlight the clinical features of these skin cancers and briefly looks at treatment and prevention.

NON MELANOMA SKIN CANCER

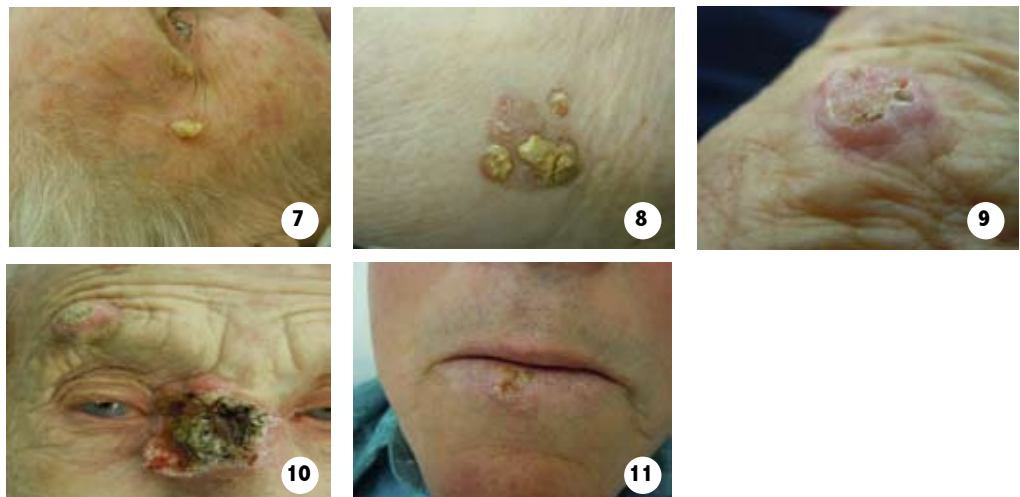
Basal Cell Carcinoma

BCCs usually present as a raised translucent/pearly lesion with visible blood vessels (1) and have a propensity for the face. As they enlarge, ulceration may occur (2). A superficial BCC can present as an erythematous scaly patch or thin plaque (3). Sometimes, BCCs may contain pigment making distinction from a melanoma difficult (4). Although BCCs do not usually spread to other parts of the body, they can cause considerable damage especially if they occur in critical sites like the eye-lid (5) and if left untreated they can slowly invade and destroy surrounding tissue (6).



Squamous Cell Carcinoma

SCC may arise on normal skin, but commonly arise in areas with marked sun damage. It can sometimes present as a horn-like growth on the surface of the skin (7). Bowen's disease also known as SCC in-situ (8), is a pre-malignant form that presents as a red, scaly patch or plaque on sun exposed areas. The common clinical presentation of SCC is a red, keratotic (a growth of keratin on the skin, often scaling) plaque or nodule (9). There is often a history of tenderness as the lesion enlarges often quite rapidly. Tumours may ulcerate (10). SCC's unlike BCC's are more aggressive and there is a greater chance of spread via the lymph nodes and blood stream if untreated. Tumours on the lip (11) and ear can spread early.



Treatment of Non-Melanoma skin cancer

A Dermatologist is trained to diagnose skin cancer early.

Treatment is individualised and is determined by several factors. Sometimes a biopsy may be needed to confirm the type of skin cancer before deciding on treatment.

A total body skin examination and palpation of lymph nodes is important. Follow up is needed to assess for recurrence.

- **Small BCCs and Bowen's disease** on non-critical sites

may be managed successfully with:

- Curettage and cauterly
- Liquid nitrogen
- Creams such as 5-Fluorouracil and Imiquimod
- Photodynamic therapy uses a cream called ALA that is applied for a few hours to the skin which is taken up by the skin cancer cells. The skin is then exposed to a red light which causes destruction of the cancer cells.
- **The treatment of choice is surgical excision** with a margin of normal skin, by a suitably trained Dermatologic Surgeon. The specimen is examined by

a pathologist to assess the completeness of the excision.

- **Mohs Micrographic Surgery** is a specialised technique that has the highest cure rate of all treatment modalities, while preserving the most amount of normal tissue. It is useful for treating high risk and recurrent tumours.

A dermatologist who has completed at least a year's training in this technique, acts as both the surgeon and pathologist. First, visible tumour is removed under a local anaesthetic. Then, a small layer of normal appearing skin

is removed around this, and is analysed by the Mohs surgeon under a microscope, while the patient waits.

If there are tumour cells another layer of skin is removed only in the area that contains the tumour cells, until the tumour is removed completely. Once free of tumour cells, the wound is repaired by the Mohs Surgeon.

- **Radiotherapy** may also be effective in selected cases where surgery is not deemed suitable.

MELANOMA

Melanoma may present as a change in an existing mole or may occur on normal skin. Any part of the body, even covered sites and the feet may be involved. The ABCD rule is useful in early detection (12-15):

A - Asymmetry

B - Border irregularity

C - Colour variability (varying shades of brown, blue, black and pink)

D - Diameter >6 mm



12



13



14



15

The ugly 'duckling sign' is a useful clue, in a patient who has multiple moles - if one mole has recently changed and stands out, it is important to have it checked. A dermatoscope is a special instrument your dermatologist may use to aid in melanoma diagnosis.

Remember, Dermatologists are trained in melanoma diagnosis, and it is important to choose a doctor with experience as early melanomas are often misdiagnosed by non-specialists like GPs.

Treatment of Melanoma

The gold standard is excision of the suspicious mole with a 2 mm margin or an incisional biopsy if this is not possible. This will allow the pathologist to provide an accurate report that guides the clinician regarding further management and prognosis.

As with all skin cancers a total body skin examination is essential with attention to the lymph nodes. In most cases, further surgery with a wider margin is all that is needed, and is based on the depth of the tumour assessed histologically.

The prognosis for thin melanomas (<1mm thickness) is very good, hence the need for early diagnosis.

Other treatment options depend on how advanced the melanoma is, and may entail removal of regional lymph nodes; or adjuvant therapies like interferon alpha, radiotherapy and chemotherapy. These are usually decided by a team of specialists including surgeons, oncologists and radiotherapists.

Top tips for preventing skin cancer

- Never use tanning beds, they increase your risk of melanoma by 75%.
- Use a broad spectrum (UVA and UVB) sunscreen with an SPF of at least 30, daily
- Wear clothes that protect you from UV rays. Any clothing you can hold up to bright light and see through does not offer you the protection you need. A wide brimmed hat is also effective.
- Avoid the sun between 10am-4pm when the sun is strongest.
- Use sunglasses with UV protection daily.

And finally...

Remember to perform regular skin self examinations. This is especially important if you have had skin cancer previously. Consult a dermatologist if there is any new, growing, bleeding or non-healing skin lesion that has been present for more than 2 weeks. The earlier skin cancer is detected, the greater the chance of a cure.