

Recognizing Skin Cancers

Unlike other types of cancers, skin cancer has received little attention and awareness among the public in Malaysia. The World Health Organisation reported that the incidence of both non-melanoma and melanoma skin cancers has been increasing over the past decades. Currently, between 2 and 3 million non-melanoma skin cancers and 132,000 melanoma skin cancers occur globally each year. As ozone levels are depleted, the atmosphere loses more and more of its protective filter function and more solar UV radiation reaches the earth's surface. This increase the risk of developing skin cancer, therefore, certain measures have to be taken by the individual to reduce the risk.

How common is skin cancer in Malaysia?

Skin cancers occur more frequently in people with fair skin. However, they can also affect those with darker complexions. In Malaysia, the *Third National Cancer Registry Report* (2003-2005) revealed that skin cancer ranked the 10th commonest cancer in Malaysia, and accounted for 2.6% of all cancer cases in the country. We believe that this figure may be under-reported.

Data from the Dermatology Clinic, Hospital Kuala Lumpur (2006-2014) showed that basal cell carcinoma is the commonest type of skin cancer, which accounted for 34.9% of cases. This is followed by cutaneous lymphoma in 25.7% of patients and squamous cell carcinoma in 20.6% of cases. Melanoma is not very common in Malaysia and occurred in only 5.4% of the patients who attended the Dermatology clinic in Hospital Kuala Lumpur.

What are the types of skin cancer?

There are two major types of skin cancers:

1. Non-melanoma skin cancers
This includes basal cell carcinoma and squamous cell carcinoma.
2. Melanoma
This can be lethal if not recognized early.

Other types of skin cancers include:

1. Cutaneous lymphoma
2. Extra-mammary Paget's disease
3. Merkel cell carcinoma
4. Kaposi sarcoma

This article will focus on the two major types of skin cancers, which are non-melanoma and melanoma skin cancers.

What are the risk factors of skin cancer? Who is most at risk?

You are at higher risk of getting a skin cancer if you have any of these 10 risk factors:

1. Fair skin
Skin cancers occur more frequently in people with fair skin. They have less number of melanin (pigment) in the skin, and therefore get less protection from damaging UV radiation.
2. Excessive sun exposure and history of childhood sunburn

Anyone who spends considerable time under the sun may develop skin cancer, especially if they have fair skin, and are not using sunscreen or protective clothing. Outdoor workers such as farmer, gardener, fisherman and building site workers have an increased risk of non melanoma skin cancer. People who have had one or more blistering sunburn as a child or teenager have an increased risk of developing skin cancer as an adult.

3. **Many moles**
People with many moles or abnormal moles called dysplastic naevi are at increased risk of skin cancer.
4. **Pre-cancerous skin lesions**
Having actinic keratosis increase the risk of developing skin cancer in future. These pre-cancerous skin lesions appear as rough, scaly, brownish patches. They commonly occur on the face, head and hands of fair-skinned people with sun-damaged skin.
5. **Personal history of skin cancer**
If you developed skin cancer in the past, you are at higher risk of developing it again.
6. **Family history of skin cancer**
If you have a positive family history of skin cancer, there is a higher chance of developing skin cancer.
7. **Genetic disorder.**
People with certain genetic disorders, for example xeroderma pigmentosum, where there is an inability to repair UV-induced DNA damage are also at risk of developing skin cancer.
8. **Weak immune system**
People living with HIV/AIDS and those taking immunosuppressant drugs after an organ transplant have weakened immune systems, which may put them at a greater risk of developing skin cancer.
9. **Exposure to radiation**
History of exposure to radiation may increase the risk of developing skin cancer, especially basal cell carcinoma.
10. **Exposure to certain chemicals especially arsenic exposure**
Excessive amount of arsenic ingestion may predispose some people to develop skin cancers. Exposure may be through medicinal, occupational or dietary substances.

How do I recognize a skin cancer?

Basal cell carcinoma usually occurs on the sun-exposed areas, such as the head and neck, face, ears and hands.

They may appear as:

- A pearly or waxy nodule, with central erosion and raised border
- A flat, flesh-coloured or pigmented lesion

Squamous cell carcinoma also occurs on sun-exposed areas. People with darker skin are more likely to develop squamous cell carcinoma on areas that aren't often exposed to the sun. They may appear as:

- A flat lesion with a scaly, crusted surface
- An ulcerated plaque, or non-healing chronic ulcer

Melanoma can develop anywhere on the body, in otherwise normal skin or in a pre-existing mole. Melanoma is commoner in people with lighter skin tone. In people with darker skin tones, they tend to occur on the palms or soles, or under the nails.

The clinical features suggestive of melanoma can be easily recognized with the mnemonic **ABCDE**:

A – Asymmetrical.

B – Borders irregular.

C – Colour variegation (two or more colours).

D – Diameter larger than 6mm (the size of a pencil rubber).

E – Elevation or evolution of the lesion.

How is skin cancer diagnosed?

Skin cancer is usually confirmed by a skin biopsy, where a small specimen of the skin is removed and examined under the microscope.

Can skin cancer be treated?

Treatment options for skin cancer depend on the size, type, depth and location of the lesions.

Treatment options available include:

1. Cryotherapy
This can be used to treat some small and superficial skin cancers and pre-malignant skin cancer (actinic keratosis). This involves freezing the lesions using liquid nitrogen.
2. Curettage and electrocautery
The cancer cells are scraped using a curette (circular blade), and any remaining cancer cells at the base is destroyed using an electric probe.
3. Excisional surgery
The doctor cuts out the cancerous tissue and the surrounding margin of healthy skin. A wide excision, where a larger margin of normal skin surrounding the cancer is removed may be recommended in some cases.
4. Mohs surgery
This procedure is often used in areas where it's necessary to conserve as much skin as possible, such as on the face and the nose area, or for larger, recurring or difficult-to-treat skin cancers. During Mohs surgery, the doctor removes the skin cancer layer by layer, examining each layer under the microscope, until no abnormal cells are seen. This procedure allows the cancer cells to be removed without taking an excessive amount of surrounding healthy skin. This method is however, not commonly available in Malaysia.
5. Radiotherapy

Radiotherapy uses high-powered energy beams to kill cancer cells. This may be an option when cancer can't be completely removed during surgery, or in patients who are unfit to go for surgery.

6. **Topical 5-fluorouracil cream**
This is a topical chemotherapy, which may be used to treat pre-malignant skin cancers, such as actinic keratosis.
7. **Topical immunomodulator (5% Imiquimod)**
This can also be used to treat actinic keratosis and superficial basal cell carcinoma.
8. **Photodynamic therapy**
This treatment destroys skin cancer cells with a combination of laser light and cream (aminolavulenic acid) that makes cancer cells sensitive to light. This method is however, not commonly available in Malaysia.

How do I prevent myself from getting a skin cancer?

You can reduce your chance of getting a skin cancer by practicing these precautionary measures:

1. Avoid excessive sun exposure
2. Liberal use of sunscreen (SPF > 30)
3. Use protective clothing
4. Check your skin regularly and report any change to your doctor

Should I worry about my skin lesion?

If you have any skin lesions with features suggestive of skin cancer as above, make an appointment to see a dermatologist. Not all skin changes are caused by skin cancer. Your doctor will do further investigations to ascertain the diagnosis (<http://www.dermatology.org.my/dermatologist.htm>).



Basal cell carcinoma



Squamous cell carcinoma



Melanoma



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