

## **Skin cancers**

Skin cancers are tumors in which there is an uncontrolled proliferation of any of the skin cells. The most common forms of skin cancer are basal cell carcinoma (BCC), squamous cell carcinoma (SCC), and melanoma. The term non-melanoma skin cancer refers to all types of skin cancer apart from melanoma. BCC and SCC are also called keratinocyte cancer. Melanoma is the most serious type of skin cancer as it will metastasize if not treated. BCC is the least worrisome as it almost never metastasizes. Most SCCs act like BCCs and don't metastasize, but a small group can.

What causes skin cancer?

Skin cancer is related to exposure to ultraviolet radiation (from sunlight or tanning beds). Skin cancer tends to affect individuals with fair skin (Fitzpatrick skin phototype I, II and III), although people with darker skin can also develop skin cancer. People who have had skin cancer have an increased risk of developing other skin cancers. A family history of skin cancer also increases risk. Other risks include:

Smoking (especially for SCC)

Human papillomavirus infection (genital warts) Immune suppression (especially organ transplant patients)

Human immunodeficiency virus infection (HIV)

Exposure to certain chemicals, such as arsenic

Longstanding skin diseases such as lichen sclerosus, lupus erythematosus, linear porokeratosis or cutaneous tuberculosis

A longstanding wound or scar.

What are the clinical features of skin cancer?

Skin cancers generally appear as a lump or nodule, an ulcer, or a changing lesion. Melanoma may be a pigmented lesion that exhibits one or more ABCDEs. A is asymmetry, B is border

irregularity, C is color irregularity, D is diameter greater than 6 mm (size of eraser on end of pencil) and E is enlarging. See your dermatologist if any of these findings are on your skin.

How is skin cancer diagnosed?

Skin cancers are generally diagnosed clinically by a dermatologist and confirmed with a skin biopsy.

Dermatoscopy (a special magnifying light) may also be used to confirm the diagnosis, to detect early skin cancers, and to exclude benign lesions.

Complete excision is usually undertaken to make a diagnosis if melanoma is suspected, as a partial biopsy can be misleading in melanocytic tumors.

What is the treatment for skin cancer?

Early treatment of skin cancer usually cures it. The majority of skin cancers are treated surgically, using a local anesthetic to numb the skin. Surgical techniques include excision, Mohs surgery, or electrodesiccation and curettage. Sometimes superficial skin cancers can be treated with topical medicines. Treatment for advanced and metastatic melanoma may include systemic immunotherapy using ipilimumab or checkpoint inhibitors pembrolizumab or nivolumab or targeted therapy against BRAF mutations using vemurafenib or dabrafenib or MEK inhibition with trametinib

Prevention/early detection includes:

Practice careful sun protection, including the regular use of sunscreens, hats/visors, clothing, and seeking shade

Learn and practice self-skin examination

Have regular skin checks

Undergo digital dermatoscopic surveillance (mole mapping) if many moles or atypical moles

Seek medical attention if notice any new, changing or enlarging skin lesions

Taking oral nicotinamide (vitamin B3) and/or increasing vitamin A in the diet may reduce the incidence of non-melanoma skin cancer.

What is the outcome of skin cancer?

Most skin cancer can be completely cured with early treatment. Advanced skin cancers are more difficult to treat and can lead to death.