

# 5 Faces of Skin Cancer

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## George's case



George is a 73-year-old farmer who presents with recurrent bleeding from a nose ulceration. The problem started five years ago.

At first, a small, white, asymptomatic papule appeared. The small nodular lesion extended peripherally in an irregular pattern. A few years later, the centrum of the lesion ulcerated and crusted. The lesion then extended peripherally and became deeper, but never healed.

During the last four months, George's lesion ulcerated and now bleeds very often. Biopsy shows basal cell carcinoma.

### What is the treatment?

Treatment depends on the type of basal cell carcinoma. Tumours around the nose, eye and ear require management by experts, such as dermatologic surgeons capable of performing Moh's surgery. Radiotherapy is also an option.

Skin cancer is currently the most commonly diagnosed cancer in Canada.<sup>1</sup> It can be divided into two forms:

- non-melanoma, which includes basal and squamous cell carcinomas; and
- malignant melanoma.

### Basal cell carcinoma

Basal cell carcinoma is the most common form of skin cancer and the least likely to metastasize, but it can be very destructive locally if not diagnosed and treated early.

### Risk factors

- Directly related to sun exposure
- Other risk factors include:
  - genetics,
  - fair skin,
  - chronic dermatitis and
  - xeroderma pigmentosum.

### Look and location

- The most common sites are face, ears and arms.
- Commonly presents as a translucent, hard mass with telangiectasia; the centre of the nodule may ulcerate, giving rise to a small crater surrounded by a pearly, rolled border.
- If numerous areas of white scarring appear within the nodule, the sclerosing (morpheiform) type of basal cell carcinoma can be diagnosed; this occurs most often on the torso.

### Stan's case



Stan, 78, has a long history of diabetes, hypertension and hypercholesterolemia. He also has a history of smoking at least 50 packs of cigarettes per year, but stopped smoking 18 years ago. However, he is still exposed to second-hand smoke, as his wife is a heavy smoker.

Stan has developed an asymptomatic lesion on his left helical rim.

#### How would you manage Stan?

A biopsy shows squamous cell carcinoma. Stan undergoes a wedge excision of the ear and repair by advancement helical flap. He is referred to an oncologist for followup.

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### Squamous cell carcinoma

Squamous cell carcinoma is most often seen in the elderly and commonly occurs on the lower lip. While it is less common than basal cell carcinoma, it has a higher risk of metastasis.

#### Risk factors

- More common in sun-damaged skin.
- Occurs with more frequency in immunocompromised patients.
- Can arise from old scars, burns and frostbite.
- Ulcers that don't heal with conservative treatment must be biopsied to rule out malignancy.
- A small number of cases are related to arsenic ingestion, insecticides, cytotoxic drugs or immunosuppression.
- Actinic keratosis is the precursor of squamous cell carcinoma.

#### Look and location

- This type of cancer is the most easily treated.
- Lesions are flesh-coloured to pink, scaly and have a rough, warty surface.
- Lesions develop on sun-exposed areas of the face, ears, dorsal hands, forearms, shoulders and, in women, on the shins.
- The ulcerated type of squamous cell carcinoma may be hard to distinguish from keratocanthoma; some physicians feel keratocanthoma is a low-grade form of squamous cell carcinoma and should be treated as such.

## Maria's case



Maria, 79, has a long history of hypertension and presents with lesions located on her forehead. This area of increased vascularity is partially covered with adherent yellow crust forms, which when removed, can sometimes cause bleeding. She is diagnosed with actinic keratosis.

### What kind of treatment is indicated?

Her large, nodular, crusted lesion is biopsied and does not show squamous cell carcinoma. She responds very well to local application of 5-fluorouracil cream, 5%. Regular use of sunscreen is strongly recommended.

## Peter's case



Peter, 54, presents with a skin lesion on his forearm, which appeared in recent weeks and has central keratotic plug and fleshy rim. Peter is very anxious and worried about cancer.

### What can you tell him?

The lesion is keratocanthoma, a relatively common, low-grade malignancy necessitating conventional excision.

## Malignant melanoma

Malignant melanoma is the least common form of skin cancer, but it is the one most likely to metastasize and be fatal.

### Risk factors

- Genetics play a role; patients with two first-degree relatives affected have a five times greater risk of developing melanoma than the general population.
- Intermittent sun exposure carries a greater risk than chronic sun exposure.
- Other possible risk factors include:
  - burning easily,
  - not tanning well,
  - use of oral contraceptives,
  - fluorescent lighting,
  - high-fat diets,
  - alcohol, coffee, tea,
  - tobacco and
  - vitamin D deficiency.

### Look and location

- Can metastasize to any organ, including the brain and heart.
- About 70% of cases occur in normal skin; others develop in pre-existing pigmented lesions, such as nevi or lentigos.
- The most common sites are the upper back in men and the back and legs in women.
- Changes in shape and colour are important early signs; ulceration and bleeding are late signs. (The key is to recognize the melanoma at the earliest stage).
- Obvious warning signs include:
  - asymmetry,
  - irregular borders,
  - colour variegation,
  - diameter > a pencil eraser,
  - elevation,
  - itchiness and
  - bleeding.

### Natalie's case



Natalie, 82, presents with flat areas varying in colour from light to dark brown. They are approximately 2.5 cm x 4 cm in size, rounded, with slightly irregular borders. They have gradually increased in size over the last few years.

#### What are the management options?

In this case, superficial radiotherapy is needed.

#### Reference

1. Tooley AJ, Paletz L: Skin cancer for the primary care physician. *Cdn J of Diagn* 2000; 17(4):84-103.

Further references available—contact  
*The Canadian Journal of Diagnosis* at  
[diagnosis@sta.ca](mailto:diagnosis@sta.ca).

### More on malignant melanoma

A well-differentiated malignant melanocyte retains its affinity for the epidermis and may slowly grow horizontally. Because the epidermis has no blood vessels and, therefore, a low potential for metastasis, excision during this phase of growth is usually curative.

Years of slow growth and regression by a number of such cells produce lentigo maligna melanoma, which is typically found in the elderly and usually located on the face. The melanoma appears as a slow-growing brown patch and can reach impressive size.

Vertical growth—seen mostly as a very dark nodule, frequently on the leg or trunk, which may bleed or ulcerate—is associated with high risk of early metastasis.

Acral lentiginous melanoma is the least common melanoma in Caucasians. It is found in African-Americans, Asians and Hispanics. It occurs on the palms, soles or subungually. It is very aggressive and metastasizes early.

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All patients with significant risk factors for skin cancers should undergo periodic skin exams. Patient self-exam may improve early detection rates. All suspicious lesions should be referred for biopsy. [Dx](#)