The ROYAL MARSDEN

Skin cancer: introduction and overview

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Skin complaints take up approximately 15% of GPs' time, and these are sometimes not straightforward to deal with.

Following is an overview of six types of skin cancer, including details of when to refer patients.

Basal cell carcinoma (BCC)

BCC is a non-melanocytic skin cancer. It is the most common skin cancer diagnosed in the UK. A full-time GP will see at least one per year. BCC is very rarely fatal, but with an ageing population their management is using an increasing proportion of health resources and expenditure.

The vast majority of BCCs are nodular and present as waxy, pearl-like lesions, with a rolled edge ulcer or telangiectasias. There are also rare forms, for example morpheic/sclerosing BCC, which presents in mid-facial sites as a depressed, waxy scar which eventually ulcerates. There is a higher risk of recurrence with these rare forms.

The risk factors for BCC are the same as for most skin cancers: sunlight exposure/sunburn/UV exposure and Fitzpatrick skin types I & II (very fair people who burn easily).

Immunosuppression increases risk, for example those with HIV, who have had organ transplant, or who use methotrexate.

There are rare genetic conditions that can make patients more at risk, including Gorlin's syndrome/naevoid BCC syndrome and Xeroderma pigmentosum.

Treatment of BCC may include:
- monitoring
- curettage and cautery/electrodessication
- cryotherapy/cryosurgery
- topical treatment (for example, imiquimod)
- photodynamic therapy
- radiotherapy.

However, it is only through surgery such as Moh's micrographic surgery or surgical excision that we can confirm that the lesion has been completely removed.

When to refer:

Low-risk BCC can be managed in primary care (see NICE 2015) if the patient is not aged 24 years or younger, is not immunosuppressed and does not have Gorlin's syndrome.

A lesion can be managed in primary care if it is:
- located below the clavicle (i.e. not on the head or neck)
- less than 1cm in diameter with clearly defined margins
- not a recurrent or persistent BCC following incomplete excision
- not morphoeic, infiltrative or basosquamous in appearance
- is not located in over important underlying anatomical structures, in an area where primary surgical closure may be difficult, or in an area where difficult excision may lead to a poor cosmetic result

Cutaneous squamous cell carcinoma (SCC)

Cutaneous SCC is a non-melanotic skin cancer. It is the second most common skin cancer in the UK. The average full-time GP will see at least one new invasive diagnosis every 1-2 years. However, they will see many more precursors to cutaneous SCC, from actinic keratosis through to Bowen's disease (SCC in situ).

Risk factors are similar to BCC and include UV exposure, older age, Fitzpatrick skin type I-III, chronic inflammation, HPV infection 16 and 18, and immunosuppression (transplant patients have a more than 50 times increased risk and CLL patients have 10 times increased risk).

When to refer:

NICE recommends: "Consider a suspected cancer pathway (appointment within 2 weeks) for people with a skin lesion that raises the suspicion of squamous cell carcinoma". Most lesions can be managed with local treatment, there is a low metastasis rate of <6%, and death is rare.

However, tumours that are over 2cm in size, more than 2mm thick, arise on the ear or lip, extend through deep to fat, arise in a scar, or involve nerve or bone should raise concern.

Surgery is similar to BCC, with Moh's surgery or complete excision with a 5mm margin. Radiotherapy is considered if there is evidence of extra-capsular spread following lymphadenectomy. There are also immune checkpoint inhibitors for locally advanced or metastatic disease.

Dermatofibrosarcoma protuberans (DFSP)

DFSP is rare, and often has indolent slow growth over years. It may appear well circumscribed but is locally infiltrative and requires excision with wide margins.

If not recognised appropriately before surgery, DFSP has a very high recurrence rate. It rarely metastasises, but if it contains fibrosarcomatous transformation, there is the risk of lung metastases.

Cutaneous sarcomas are very rare, but there are two other types to be aware of:

- Kaposi's sarcoma (KS): Purpuric macules of vascular and lymphatic proliferation in skin. It is related to human herpes virus 8. Subgroups at risk include men of Mediterranean or European Jewish descent, and those who are immunosuppressed.

- Angiosarcoma (AS): Arises from endothelial cells of vessels and lymphatics. Appears as an ill-defined 'bruise' in an at-risk area and may go on to develop nodularity with easy bleeding. There is association with radiation exposure (post breast, head and neck cancer radiotherapy) and chronic lymphoedema (post-lymphadenectomy). There are high recurrence and metastatic rates, with a poor prognosis. Treatment involves surgery and taxane-based chemotherapy.

Pilomatrixoma

Pilomatrixoma is a superficial benign skin tumour. It arises from hair follicle matrix cells, and is usually an asymptomatic, firm, slow-growing, mobile nodule arising from the dermis. It is more common in children and young adults. Complete surgical excision is necessary, or it will recur.

Merkel cell carcinoma (MCC)

MCC is rare, but incidence is increasing faster than any other skin cancer or solid tumour. It is a rapidly growing tumour usually on sun-exposed areas. It is mainly seen in older Caucasian men.

MCC needs multidisciplinary management. It will be staged with PET-CT, with selective use of sentinel lymph node biopsy to guide treatment. A discussion will take place on the role of radiotherapy, chemotherapy and immunotherapy.

Malignant melanoma

Melanoma is the third most common skin cancer in UK. The average full-time GP will diagnose one new case every three years. It accounts for more skin cancer deaths than all other skin cancers combined, and it increasingly affects younger patients. Up until 2010 it was associated with a very poor prognosis.

There is increased risk with increased UV exposure. Fairer skin types are more at risk, but the risk exists in all skin types. For patients who have had pancreatic cancer or astrocytoma, or if there is a family history of melanoma, extra caution is needed.

When to refer:

NICE states that cases should be referred if there is a score of 3 or more on the Glasgow 7-point weighted checklist (NICE 2015), or if a specialist trained in dermoscopy suggests melanoma of the skin or if there is an amelanocytic nodule in pigmented/ non-pigmented skin.

In clinic, there should be a history and physical exam, and vitamin D levels checked. If it is an atypical mole but doesn't need excision, it can be followed up with photodocumentation (dermoscopy) at 3, 6, 12 and 24 months. Melanomas can be managed by observation, ablation, shaving or excising (with a 5mm margin).