General practice management of keratinocyte cancer

Keratinocyte cancer (KC), previously called non-melanoma skin cancer, includes basal cell carcinoma (BCC) and cutaneous squamous cell carcinoma (cSCC). GPs have a central role in the prevention, detection and management of KCs.

Prevention and early detection

Prevention: Advise regular sun protection (seeking shade, hats, protective clothing, sunglasses, sunscreen) when the UV index is 3 or higher. Nicotinamide may be a useful adjunct to sun protection in high-risk patients with a history of multiple KCs.

Early detection: Offer opportunistic skin examinations. Identify patients at high risk and offer regular skin examinations. For patients at very high risk, offer specialist assessment at least annually.

Risk factors for KC

- History of previous KC or multiple actinic skin lesions
- Age > 40 years
- Light skin (Fitzpatrick type I–III)
- Chronic immunosuppression, e.g. organ transplant, chronic lymphocytic leukaemia (very high risk)
- Exposure to arsenic

Clinical assessment

History: Ask about changes in skin lesions over time. Closely examine any lesion that is non-healing or associated with local irritation, tenderness, induration, ulceration or bleeding – consider biopsy.

Examination: Dermatoscopy can improve diagnostic accuracy for KCs as well as melanomas.

Management

If unsure, discuss the management plan with an experienced clinician or pathologist. Consider referral to a specialist or multidisciplinary team for difficult or high-risk lesions.

Factors to consider: tumour biology, tumour site, size, presence of perineural invasion or lymphovascular invasion, patient's general health.

Surgical treatment: Surgical excision (most common) offers the best chance of cure. Small uncomplicated KCs should be managed with elliptical excision and direct closure under local anaesthetic.

Nonsurgical treatment: Options when surgery is inappropriate include cryotherapy, electrodessication, and topical therapies. Specialist treatments include Mohs micrographic surgery, radiotherapy and photodynamic therapy.

Follow-up

All patients with a previous KC should undergo an annual skin examination (complete skin check by a clinician, preferably with dermatoscopy) as a minimum requirement.

People who have been treated for a KC have a higher incidence of subsequent KC. Regular follow-up should be arranged to counsel patients on their KC risk, provide education on prevention and early detection, and to identify new skin lesions, recurrent skin lesions, and metastatic disease.

Frequency and duration of follow-up: There are no standard evidence-based protocols for surveillance after KCs. Consider risk associated with original lesion (location, histological findings, histological margins, treatment modality) and number of previous KCs.

Recurrence: BCC recurrence and metastasis is rare. Risk factors for cSCC recurrence and/or metastasis include thicker lesions (e.g. >2mm), invasion into the subcutaneous fat, perineural invasion, diameter >20mm, location on the temple, ear or lip, immunosuppression, and poor differentiation.

⚠ For any lesion with suspicion of melanoma, excise with 2mm clinical margin or refer patient promptly for a second opinion.

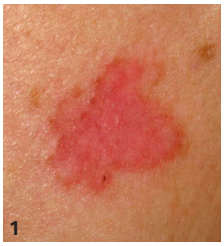
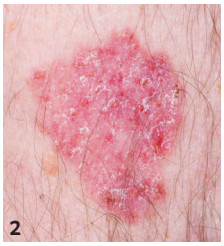
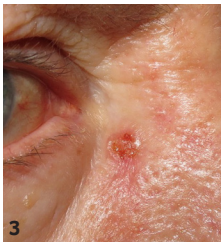
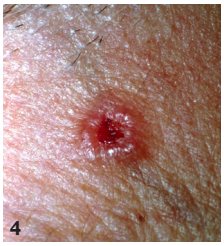
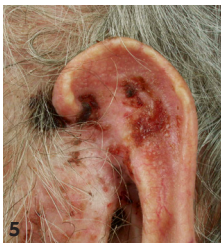
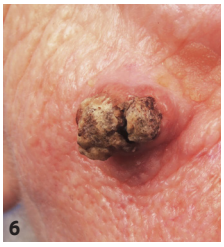
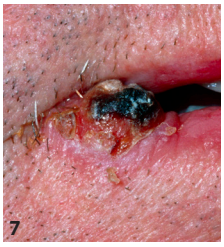
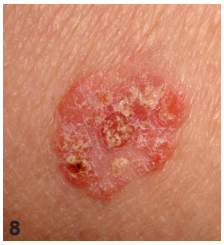
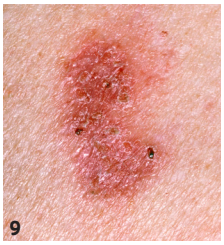
When to refer

- Diagnosis or management uncertain
- Multiple tumours
- Larger tumours – may require grafts and flaps
- Difficult or anatomically significant tumour site (e.g. lips, nose, ears, eyelid, scalp)
- Cosmetic concerns (e.g. facial lesion, keloid scarring potential)
- Incomplete excision
- Tumour recurrence despite appropriate management
- Sclerosing (morphoeic) BCCs (particularly on nose or nasolabial fold)
- cSCC with palpable regional lymph nodes
- Poorly differentiated subtype
- Immunosuppression
- GP unable to provide regular follow-up care

This summary card was developed by Dr Kylie Vuong in collaboration with Dr Paul Fishburn, Dr Helena Rosengren and Professor Stephen Shumack. Developed with funding received from the Australian Government.

This fact sheet is based on Cancer Council Australia's *Clinical practice guidelines for keratinocyte cancer* (2019). Available from: https://wiki.cancer.org.au/australia/Guidelines:Keratinocyte_carcinoma.

Cancer Council

Common KCs	Clinical features	Management options in general practice
Superficial BCC  1  2	Usually occur on the trunk and limbs Well-defined, erythematous, scaly or slightly macular lesion May have pearly rim or islands of pearliness	Complete surgical excision, with histological evidence of clearance Electrodessication (often combined with curettage to improve cure rates), for superficial BCC <2cm Imiquimod 5% cream* Cryotherapy for superficial BCCs <2cm when diagnosis is confirmed on biopsy and regular follow-up is available
Nodular BCC  3  4	Usually occur on the head and neck Shiny, pearly, telangiectatic papule or nodule	Complete surgical excision, with histological evidence of clearance Electrodessication (often combined with curettage to improve cure rates), for nodular BCC <2cm
Sclerosing (morphoeic) BCC  5	Usually occur on the head and neck May resemble pale scar Feels indurated and may extend more deeply	Complete surgical excision, with histological evidence of clearance Consider referral for Mohs micrographic surgery
cSCC  6  7	Well-defined erythematous papule or nodule Varying degree of hyperkeratosis Some may present as ulcer without pre-existing papule or nodule	Complete surgical excision, with histological evidence of clearance Consider referral for radiotherapy when surgery is considered inappropriate
Bowen's disease (SCC in situ)  8  9	Well-defined erythematous plaque Varying degree of hyperkeratosis	Complete surgical excision, with histological evidence of clearance Fluorouracil 5% cream† Cryotherapy, for Bowen's disease <2cm when diagnosis is confirmed on biopsy and regular follow-up available Active surveillance may be an option for Bowen's disease <2cm when diagnosis is confirmed on biopsy and treatment is associated high risk of complications

*Approved by Therapeutic Goods Administration (TGA) for biopsy-proven superficial BCC where surgery is considered inappropriate;
† approved by TGA for Bowen's disease.

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