Development of a Clinical Decision-Making Aid based on the British Association of Dermatologists (BAD) Guidelines for the Management of Cutaneous Squamous Cell Carcinoma (cSCC) 2020

S.K.Lim, R.Long, S.E. McAllister
Northern Ireland Regional Plastic Surgery Service, Ulster Hospital, Dundonald

Problem

- In 2020, the BAD produced updated national Guidelines for the management of patients with cSCC.
- Substantial updates were made in risk stratification, excision margins, requirements for multidisciplinary discussion, adjuvant treatment and follow up.
- A clinical decision-making aid would assist in consistent implementation of Guidelines by the multidisciplinary team (MDT).

The Decision Making Aid

Management of Primary Cutaneous Squamous Cell Carcinoma (cSCC)

S.K.Lim, R.Long, S.E. McAllister
NI Regional Plastic Surgery Service

Treatment options for primary cSCC are standard surgical excision, Mohs micrographic surgery, curettage, cautery and radiotherapy.

Summary surgical treatment algorithm for primary cSCC

Freely mobile

Offer standard surgical margins (to next anatomical deep plane)

Low risk tumour : ≥4mm margin

High risk : ≥6mm margin

Very high risk: ≥10mm margin

positive margin or <1mm clear (peripheral and/or deep)

Offer re-excision (SSMDT discussion, consider Mohs micrographic surgery or radiotherapy)

clear margin (peripheral and deep) & no other indications for adjuvant radiotherapy

Clinically fixed/bone involvement on imaging

URGENT SSMDT referral

10mm clinical margin+/-bone resection

consider adjuvant radiotherapy

Risk	Minimum excision margin for primary cSCC
Low	4mm
High	6mm
Very high	10mm

Management of primary cSCC				
Tumour factors	Risk	Low (all factors denote low risk tumour)	High (any single factor denotes high risk tumour)	Very high (any single factor denotes a very high risk tumour)
	Diameter	≤ 20mm (=pT1)	>20-40mm (=pT2)	>40mm (=pT3)
	Thickness	≤ 4mm	>4-6mm	>6mm
	Tumour depth	dermis	subcutaneous fat	-beyond subcutaneous fat -any bone invasion
	Perineural invasion	No	Present-dermal only, nerve diameter <0.1mm	present in named nerve; nerve ≥0.1mm; or nerve beyond dermis
	Lymphovascular invasion	No	Yes	
	Site		-Ear / lip -Tumour from within scar/ area of chronic inflammation	
	Histological features and subtypes	Well differentiated or moderately differentiated	Poorly differentiated histological margin	-high grade histological subtype: adenosquamous, desmoplastic, spindle/ sarcomatoid/ metaplastic -in transit metastasis
Margin status		Clear pathology margins in all dimensions (>1mm)	-One or more involved/close (<1mm) pathology margin in a pT1 tumour -Close pathology margins (<1mm) in a pT2 tumour	One or more involved or close (<1mm) pathology margin in a high risk tumour
Patient factors	Host immune status	Immune competent	-Iatrogenic/ biological therapies -fragility/co-morbidities -HIV infection on HAART	AS FOR HIGH RISK especially: solid organ transplant recipients; haematological malignancies
Return to MDT	SSMDT Discussion	Not needed	Discuss at SSMDT	Discuss at SSMDT
Follow-up	Follow-up	Follow-up in secondary care not needed after single post-treatment appointment, where appropriate.	4-monthly for 12 months + 6-monthly for the 2nd year especially if several risk factors apply.	4-monthly for 2 years and 6-monthly for a third year.
	Inform patient and GP of the risk of further keratinocyte cancer within 5years	40%	80%	80%

All patients require full skin check, examination of regional lymph node basin, discussion of diagnosis and patient education about sun protection and skin surveillance.

References:
S.G. Keohane et al, British Association of Dermatologists guidelines for the management of people with cutaneous squamous cell carcinoma 2020

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Strategy for Change

- An oral presentation highlighted important changes from previous Guidelines.
- A single-page decision-making aid was designed for use in electronic format, or display in poster format in clinic or theatre.

Measurement of Improvement

- A five-item questionnaire tested knowledge of the main updates in the Guidelines.
- A QR code linked to a Google Form questionnaire, was administered and completed both before the presentation, and again following the presentation, this time with the benefit of having the decision-making aid for reference

Effects of Change

- The decision-making aid underwent two trials: regional plastic surgery audit meeting and specialist skin MDT.
- There was a statistically significant increase ($p < 0.05$) in scores in all questions, following the oral presentation and distribution of the clinical decision-making aid. .

Discussion

- This was enthusiastically received, and is being prepared for regional adoption via the NI Skin Cancer Guidelines.