Basal Cell Carcinoma

Clinical guidelines, Danish Dermatological Society

Diagnosis

Should be based on histological examination, except for the patients with multiple, clinically similar tumours. In such cases a representative biopsy from a tumour is sufficient.

In case of clinical suspicion of basal cell carcinoma (BCC), an appropriate material for histological examination is:

- Punch biopsy (should be taken from the thick, not ulcerated portion of the tumour; biopsies from margins should be avoided)
- Excision biopsy
- Curettage material

Histology report, if possible, should contain the following information:

- Histological type (nodular, superficial, micronodular, basosquamous, morpheaform, infiltrative, mixed, other or not definable)
- Perineural or perivascular invasion
- Radicality of excision (if relevant)

Staging

BCC staging is made according to the following table:

TNM		Description	
Т	TO	No primary tumour	
	T1	Tumour size less than 2 cm	
	T2	Tumour size ≥2 cm <5 cm	
	T3	Tumour size ≥5 cm	
	T4	Tumour invading extracutaneous structures such as fascia, muscle or bone	
Ν	Nx	Lymph node status not possible to assess	
	N0	No lymph node involvement	
	N1	Involvement of lymph nodes	
М	Mx	Not possible to assess	
	M0	No metastases	
	M1	Presence of metastases	

Т	Ν	Μ
0	0	0
1	0	0
2, 3	0	0
all	0, 1	0
all	all	1
	0 1 2, 3 all	I IV 0 0 1 0 2, 3 0 all 0, 1

Risk assessment

The tumours is considered of high-risk if it has 2 or more of the following features:

- Stage II or higher
- Localisation: lip, scalp, nose, eyelids, ear
- Histological type: morpheaform, micronodular, basosquamous, or presence of perineural invasion
- Recurrent tumour in the head and neck area

Treatment

The primary goal is tumour eradication at the first treatment attempt, since it is documented that recurrent tumours have a worse prognosis. However, a primary palliative treatment or no treatment is acceptable in selected, individual cases when the risk of aggressive treatment outweighs the benefit (e.g. patients with short life expectancy).

The choice of treatment depends on whether BCC is the high-risk or low-risk tumour.

Low-risk tumours

Following treatments are permissible: excision, curettage with cauterisation, cryotherapy, radiotherapy. The choice of treatment depends on individual preferences and expertise, experienced dermatologist should achieve >95% cure rate with any of the above-mentioned modalities.

- *Curettage*: should be performed twice and followed by cauterisation. Material should always be sent for histology
- *Excision*: should be performed with a minimum of 4 mm margin to the tumour. Material should always be sent for histopathology and the completeness of tumour removal should always be assessed. If excision is not radical, the patient should be informed and one of the following approaches can be chosen: *i*) watchful wait (only 50% of low-risk tumours will recur), *ii*) re-excision, *iii*) radiotherapy. If the deep margin is involved the risk of relapse is high and re-excision or radiotherapy should be attempted
- *Cryotherapy*: double, deep freeze with N2 spray
- *Immunomodulation*: Imiquimod can be used if the cosmetic outcome is important; the cure rate is probably lower than that of surgery
- *PDT*: is effective treatment for low-risk tumours, should be preceded by curettage of the tumour

High-risk tumours

Treatment of choice is surgery or radiotherapy. Curettage, cryotherapy, PDT or immunomodulation are not recommended as monotherapies.

- *Excision*: should be done with a minimum of 6–12 mm margin to the visible tumour. If histology does not confirm radical excision re-excision or radiotherapy should be attempted, watchful wait is not appropriate for high-risk tumours
- Radiotherapy: should be given with the total dose of 40 Gy (40–50 kV), usually in 5–10 fractions

Follow-up

The aim of follow-up is to monitor for relapses and to screen for new tumours. All patients should have a possibility to be followed for 5 years, but in uncomplicated cases the follow-up can be performed by a general practitioner or by the patient himself. It is recommended that high-risk tumours are always controlled by a physician at least 6 and 12 months after treatment.

Follow-up procedures:

- Inspection and palpation of the treated area (at every visit)
- Screening for new tumours by visual inspection of the head and neck area (at least once a year)
- Total-skin examination in high-risk patients, i.e. patients with one or more of the following risk factors:
 - 1. Multiple PUVA treatments
 - 2. Earlier exposure to chemical carcinogens (arsenic, polycyclic carbohydrates)
 - 3. Immunosuppressed patients
 - 4. Extensive and multiple precursor lesions in different body areas: actinic keratoses, Bowen's disease
 - 5. Multiple skin cancers in different body areas

Original BCC guidelines (in Danish) are published on the Danish Dermatological Society website (www.dds.nu) using link http://www.dds.nu/index.php?p=5&la=da

Comments to guidelines - edited by Tomas Norman Dam

Comments to this guideline received by Forum for NDV Editors have been compiled into a summary edited by CME editor Tomas Norman Dam. Further comments to the guidelines from Forum readers can be mailed to cme@medicaljournals and will be presented open for discussion in the next issue of the CME section.

In general:

Generally all comments from the editors have been related to guidelines regarding treatment and follow-up. One editor questioned whether TNM classification is useful and argued that tumour thickness could be a more relevant parameter if photodynamic therapy is considered.

Comments regarding treatment:

Curettage should be performed twice and followed by cauterisation based on the comments it has been emphasised that cauterisation should be performed after both times of curettage.

If excision of a low-risk tumour is not radical it could be argued that re-excision should be performed since 50% of patients will come back with a recurrence. It has been suggested that radiotherapy should only be offered if excision is not possible.

It was pointed out that cryotherapy (double, deep freeze with N2 spray) should only be done after curettage and that Imiquimod should only be considered for thin superficial tumours.

For high-risk tumours and even near high-risk areas such as eyelid, ear, lip, nose, nasolabial and paranasal fold

Mohs surgery excision should be considered with wide margin (not defined) to the visible tumour (Sweden). Tumours with poorly defined margins and tumors found in immunosuppressed patients should also be considered high-risk tumours. Furthermore it was commented that radiotherapy is contraindicated in immunosuppressed patients and usually not used in young patients (Norway). Even for high-risk tumours excisions with smaller margins than the margins suggested in the Danish guideline were tolerated by the commenting editors.

Comments regarding treatment follow-up:

There was agreement that all patients should have a possibility to be followed for 5 years, but in uncomplicated cases the follow-up can be performed by a general practitioner or by the patient himself. It is recommended that high-risk tumours are always controlled by a physician at least 6 and 12 months after treatment. It was argued that a total-skin examination should be done (not just head and neck) during follow-up procedures. There was some controversy whether a total-skin exam should be done at every visit, but since the intervals for controls have not been defined in the guidelines, there is now more room for discussion among the readers of *Forum*.

For further information please visit our website: http://forum.medicaljournals.se/guidelines.