Pan-Birmingham NHS
Cancer Network

Coversheet for Network Site Specific Group Agreed Documentation

This sheet is to accompany all documentation agreed by Pan Birmingham Cancer Network Site Specific Groups. This will assist the Network Governance Committee to endorse the documentation and request implementation.

Document Title	Skin Cancer Pathology Guidelines
Document Date	June 2009
Document Purpose	This document is aimed to assist the examination and reporting of skin cancer specimens.
Authors	Original document prepared by Dr Paul Craig (Consultant Pathologist - 3 Counties Cancer Network) Use/ adaptation by the Pan Birmingham Cancer Network approved by Annie Young (Network Director - 3 Counties Cancer Network)
References	Page 6 of document
Consultation Process	The Pathology Network Site Specific Group and the Skin Network Site Specific Group
Review Date (must be within three years)	June 2012
Approval Signatures: Network Site Specific Group Clinical Chair	
Date Approved by Network Governance Committee	21/07/09

Endorsed By The Governance Committee

Skin Cancer Pathology Guidelines

Version History

Version	Date	Summary of change/ process
0.1	21/05/09	Approval by Skin NSSG and Cellular Pathology representatives
0.1	05/06/09	Approval by Cellular Pathology NSSG Chair
1.0	21/07/09	Endorsed by the Governance Committee Guidelines Review Sub Group

1. Scope of the Guideline

The network guidelines for the examination and reporting of skin cancer specimens take into account the following publications:

a) Minimum datasets for histopathology reporting of skin cancers. The Royal College of Pathologists February 2002. *(Please note that these datasets are under review and an updated version is due in 2009.)*

b) Improving Outcomes Guidance for people with skin tumours including melanoma: The Manual Feb 2006 (IOG).

2. Guideline Background

2.1 The histopathologist plays a central role in the diagnosis and staging of skin cancers. The information in their reports assists in the planning of future treatment of the patient.

2.2 In Pan Birmingham Cancer Network there are Local Skin Multidisciplinary Teams: LSMDT and two Specialist Skin Multidisciplinary Teams: SSMDT.

2.3 The IOG states with respect to the SSMDT:
"Ideally there should be at least two specialist dermatopathologists or histopathologists with a special interest in dermatopathology. This is to provide flexibility and adequate cover during leave periods. There should be a designated lead in the area and ideally a deputy lead. The lead and deputy lead engaged in reviewing and reporting SSMDT skin cancer cases should each attend over 50% of SSMDT. Other histopathologists reviewing and reporting SSMDT work should be able to demonstrate some MDT activity. All specialist histopathologists reviewing and reporting common and rare skin cancers should be able to demonstrate experience, competency and skills sufficient to fulfil the task or undertake appropriate training to acquire the skills. The level of competence and skills for this activity is broadly that of the RCPath Diploma in Dermatopathology and American Board Certification in dermatopathology. These qualifications are not, however, regarded as mandatory. All specialist histopathologists engaged in this work should participate in some CPD relevant to common and rare skin cancers and participate in some CPD relevant to common and rare skin cancers and participate in an appropriate EQA scheme. Ideally this should be a national specialist EQA scheme in dermatopathology, when available. Those reporting primary cutaneous lymphoma must participate in an EQA scheme including this group of diseases. It is also desirable that the

CPD is facilitated by membership of appropriate national societies (such as the British Society for Dermatopathology and/or the UK Cutaneous Lymphoma Group). Each cancer or pathology network could hold a panel of histopathologists suitable for SSMDT participation based on these criteria.

Histopathologists restricting their activity in the SSMDT centre to work at the LSMDT level should be able to demonstrate the same activity as defined previously. It is acknowledged that because of workforce shortages in histopathology there could be an implementation delay of these goals in some centres."

Guideline Statements

3. The multi-disciplinary team meetings

3.1 The following cancer cases should be reviewed by a cancer multi-disciplinary team (LSMDT), which has a histopathologist as a core member.

a) High risk/ recurrent basal cell carcinomas or those involving margins
b) All squamous cell carcinomas
c) All melanomas
d) All lymphomas
e) All cutaneous sarcomas
f) Rare skin tumours

3.2 Following this local review the following will be reviewed by the appropriate specialist MDT (SSMDT). The IOG states that the following should be reviewed:

a) Complex BCC requiring Mohs or complex surgery
b) High risk or metastatic SCC
c) Newly diagnosed melanomas Stage IIb (2.01 – 4mm with ulceration (pT3bN0M0) or >4mm without ulceration (pT4aN0M0) or higher, multiple melanomas and children under 19 years).
d) All lymphomas (these maybe reviewed by the skin lymphoma MDT)
e) All cutaneous sarcomas (these maybe reviewed by the sarcoma MDT)
f) Rare skin tumours

3.3 There should be a nominated lead and deputy histopathologist for the both the LSMDTs and SSMDTs. The histopathologists engaged in skin cancer diagnosis should participate in an appropriate external quality assessment (EQA) scheme and demonstrate evidence of continuing professional development (CPD) relevant to skin cancer. **The named lead histopathologist is Claudia Roberts, from University Hospital Birmingham NHS Foundation Trust.**

3.4 The MDT (either local or specialist) lead histopathologist should attend over 66% of MDT meetings of which they are core members. Other histopathologists reporting skin cancer should be able to demonstrate some MDT activity.

3.5 Patients with lymphoma and other rare skin cancers should be dealt with by the appropriate SSMDT in the network. All cases should be reviewed by the dermatopathologist designated by the network to have an interest in and lead responsibility for, cutaneous lymphoma reporting. It is appropriate for the network lead dermatopathologist in lymphoma reporting to attend the clinics as

necessary. The lead dermatopathologist in lymphoma reporting is likely to be, but is not necessarily, the SSMDT lead dermatopathologist.

3.6 All cases referred to the SSMDT should receive formal diagnostic histopathological review. There may be a few exceptions; for example, cases referred with extensive BCC for surgical reconstruction.

3.7 Specimens should be reported within an agreed time frame so as to allow appropriate clinical decision making at a planned MDT meeting.

4. Specimen examination

4.1 The local protocol for specimen examination should take into account national guidelines and should be regularly reviewed and updated by the lead histopathologists in consultation with other histopathologists who participate in the service delivery.

4.2 The RCPath minimum dataset (Feb 2002) recommends the following:
"The margins of all skin biopsies undertaken for excisional purposes for melanocytic lesions and proven or suspected skin cancer should be marked using the standard technique of 'painting' with substances such as silver nitrate, Indian ink, alcian blue or commercial preparations. When Moh's surgery has not been undertaken, this is the only way to obtain a reasonably accurate assessment and/or measurement of the peripheral and deep surgical margins. Its routine use with all large specimens, especially with clearly visible small central lesions, is more debatable. Even in these circumstances, however, the method remains desirable in view of the possibility of unexpected microscopic extension of the lesion.

Curetted specimens, incisional biopsies, shave biopsies and punch biopsies (not performed for excisional reasons) do not necessarily require the margins to be marked. These specimens are often small and can be embedded in toto. Slightly larger pieces of tissues can be bisected. The examination of specimens requiring orientation can be facilitated by the use of different coloured inks on different margins or the insertion of coloured agar into the cassette.

The method of handling excisional biopsies depends on the size of the biopsy, whether the lesion can be seen, the position of the lesion on the specimen and the suspected type of cancer. It is recommended that separate judgements are made on each individual case taking these variables into account, together with the following guidelines.

Small excisional biopsies (say up to 5mm) can be embedded in toto. The requirement for step levels/sections in any type of biopsy is dependent on the requirement to identify a lesion, establish a definitive diagnosis and assess the margins. There is however, an increasing tendency to undertake step levels with severely dysplastic, in situ and difficult melanocytic lesions.

In any larger specimen requiring 'trimming', in which the lesion can be seen, a basic principle is that the specimen should be cut at 2-5mm intervals so that the nearest naked-eye margin to the lesion can be assessed histopathologically.

For many skin ellipses, this will require transverse rather than longitudinal sectioning. When the lesions cannot be seen, transverse sectioning across the smallest diameter should be performed. When multiple sectioning is required, this should be undertaken by the 'sliced-bread'/ 'toastrack' method.

In specimens under 10mm, it is recommended that all lesional tissue is examined or the entire specimen if the lesion cannot be seen.

Excisional biopsies over 10mm should take into account the type of skin cancer present. Generally, the whole of a suspected or proven malignant melanoma should be embedded and examined. For basal or squamous cell carcinoma, a sampling method is acceptable, taking blocks from areas of maximum lesional thickness, ulceration and the nearest margins.

When the lesion is not discernible, the 'polar' ends from the long axis of skin ellipses should be identified separately. These can be placed into one or two designated cassettes, depending on whether orientation of the specimen has been indicated clinically. Similarly, when the lesion can be seen, it is increasingly regarded as good practice to place the 'polar' ends from the long axis of skin ellipses into one or two designated cassettes. Polar ends can be embedded and cut from the 'face down' aspect. If initial sections show malignant involvement, step-levels can be undertaken to assess clearance up to the extreme peripheral margins. Cruciate margins at 3, 6, 9 and 12 o'clock can be sampled on larger circular specimens."

5. Grading and staging of skin tumours

a) Basal cell carcinoma – the growth pattern should be reported according to the RCPath dataset.
b) Squamous cell carcinoma – well, moderate, poor and sarcomatoid.
c) Melanoma – the subtype should be recorded according to the RCPath dataset.
d) Lymphoma – reported based on WHOEORTC classification.
e) Sarcomas – reported based on WHO/FNCLCC classifications.
f) Tumour staging: TNM classification of malignant tumours (6th edition).
g) For melanomas the AJCC staging system.

6. Use of ancillary laboratory techniques

6.1 All laboratories providing a histopathology service in the network must have at least conditional CPA accreditation and ensure participation in an appropriate EQA programme, which demonstrates satisfactory laboratory performance.

6.2 A wide range of immunohistochemical markers are available within the network.

7. Audit

7.1 All histopathologists reporting skin cancer specimens should participate in a relevant EQA scheme and local audits (including an assessment of consistency where more than one histopathologist participates in service provision). The audits should include:

a) Review of compliance with procedures for specimen examination and reporting.
b) Completeness of minimum datasets.
c) Diagnostic agreement/ disagreement during review of cases for MDTs.
d) Review of diagnostic consistency between pathologists using data from cases in EQA circulation or blind circulations.

7.2 The results of the audit should be discussed with all pathologists who provide skin cancer pathology services.

8. Referral for review or specialist opinion

8.1 NICE recommends that diagnostic biopsies are reviewed in the hospital where definitive surgery is to be carried out. See also above (para 3.2) regarding cases reviewed at SSMDT.

9. Minimum dataset for reporting

9.1 The datasets in the appendix are based on the minimum dataset for histopathology reports as published by the Royal College of Pathologists (February 2002).

Monitoring of the Guideline

Implementation of the guidance will be considered as a topic for audit by the NSSG in 2012.

Authors

Prepared by Dr Paul Craig (3 Counties Cancer Network)

References

1. Veronesi U, Cascinelli N, Adamus J et al. Thin stage 1 primary cutaneous melanoma. Comparison of excision with margins of 1 or 3 cm. New Eng J Med 1988:318:1159-1162.
2. Balch CM, Urist M, Karakousis M et al Efficacy of 2 cm surgical margins for intermediate thickness melanomas (1-4 mm). Results of a multi-institutional randomised surgical trial. Ann Surg 1993: 218: 262-269.
3. Balch C, Soong S-J, Murad TM et al. A multifactorial analysis of melanoma 3. Prognostic factors in melanoma patients with lymph node metastases (stage2) Ann Surg 1981; 193: 377-388.
4. MacKie R, Hunter JAA, Aitchison T et al Cutaneous malignant melanoma Scotland 1979-89 Lancet 1992; 339: 971-975.
5. Drake L, Ceilley R, Cornelison R et al. Guidelines for malignant melanoma J. Am. Acad. Derm 1993;28:638-641.
6. Drake L, Ceilley R, Cornelison R te al. Guidelines of care for cutaneous squamous cell carcinoma J. Am. Acad. Derm 1993;28:628-631.
7. Doherty VR,MacKie RM. Experience of a public education campaign on early detection of cutaneous malignant melanoma Br.Med.J. 1988; 297: 388-391.
8. American Joint Committee on Cancer. *Manual for staging of cancer*, 3rd edition. JB Lippincott Co., Philadelphia, 1988.
9. Diagnosis and treatment of early melanoma NIH Consensus Statement JAMA 1992; 268:1314-1319.
10. Leslie DF, Greenway H. Mohs micrographic surgery for skin cancer. Australas J. Dermatol. 1991;32:159-164

11. Rowe DE, Carroll RJ, Day CL. Prognostic factors for local recurrence, metastasis, and survival rates in squamous cell carcinoma of the skin, ear and lip. J Am Acad Dermatol 1992;26:976-990.
12. Marks R, Rennie G, Selwood TS. Malignant transformation of solar keratoses to squamous cell carcinoma. Lancet 1988;1:795-797.
13. Australian Melanoma Guidelines.
14. U.K. Melanoma Guidelines.
15. Royal College of Pathologists Guidance

Acknowledgement
Grateful acknowledgement to Dr Paul Craig (Consultant Pathologist) and Annie Young (Network Director of 3 Counties Cancer Network)

Approval Date of Network Site Specific Group Date: 5 June 2009

Approval Date of the Governance Committee Date: 21 July 2009

Approval Signatures
Pan Birmingham Cancer Network Governance Committee Chair
Name: Doug Wulff

Signature: Date: 21 July 2009

Pan Birmingham Cancer Network Manager
Name: Karen Metcalf

Signature: Date: 21 July 2009

Network Site Specific Group Clinical Chair
Name: Shireen Velangi

Signature: Date: 5 June 2009

BASAL CELL CARCINOMA HISTOPATHOLOGY REPORT
Surname ..... Fore(first)names ..... Date of birth ..... Sex.....
Referring organisation..... Hospital no ..... NHS no .....
Date received..... Date reported..... Report no.....
Reporting organisation.....Authorising pathologist.....Referring clinician.....

Specimen

Clinical site (primary diagnosis).....

Specimen type Excision ☐ Incisional (diagnostic) biopsy ☐ Punch biopsy ☐
Shave ☐ Curettings ☐
Uncertain/other ☐ (Please specify) .....

Gross description

Size of specimen Length ..... mm Breadth ..... mm Depth ..... mm
Maximum diameter of lesion ..... mm Uncertain ☐ Not discernible ☐
Other (please specify)
.....

Histology – classification

Type of growth pattern Tick (may be more than 1)

Nodular ☐
Superficial ☐
Infiltrative/morphoeic ☐
Micronodular ☐
Other (specify) ☐

Type of differentiation

Severely atypical or malignant squamous component present Yes ☐ No ☐ (basisquamous carcinoma)

Invasion (for infiltrative, morphoeic, micronodular and basisquamous types)

Lymphatic/blood vessel invasion Yes ☐ No ☐ Uncertain ☐
Perineural invasion Yes ☐ No ☐ Uncertain ☐

Excision margins

Distance to nearest peripheral Not involved (clear) ☐ (..... mm) Involved ☐
Distance to nearest deep Not involved (clear) ☐ (..... mm) Involved ☐

Comments

Pathological staging (excision specimens only) TNM pT .....
Signature ..... Date reported ...../...../..... SNOMED Code
T01000
M80903

CUTANEOUS INVASIVE SQUAMOUS CELL CARCINOMA HISTOPATH OLOGY REPORT

Surname ..... Fore(first)names ..... Date of birth ..... Sex.....

Referring organisation..... Hospital no ..... NHS no .....

Date received..... Date reported..... Report no.....

Reporting organisation.....Authorising pathologist..... Referring clinician.....

Specimen

Clinical site (primary diagnosis).....

Specimen type Excision □Incisional (diagnostic) biopsy □Punch biopsy □ Shave □Curettings □

Uncertain/other □(Please specify) .....

Gross description

Size of specimen Length ..... mm Breadth ..... mm Depth ..... mm

Maximum diameter of lesion ..... mm Uncertain □Not discernible □

Other (please specify)

.....

Histology – classification (Tick one)

Classic/no special type □

Spindle cell □

Acantholytic (pseudoglandular/adenoid) □

Verrucous □

Desmoplastic □

Other (specify) □

Grade

Well differentiated □

Moderately differentiated □

Poorly differentiated □

Undifferentiated/anaplastic □

Tumour thickness..... mm Clark level: I II III IV V

Invasion

Lymphatic/blood vessel invasion Yes □No □Uncertain □

Perineural invasion Yes □No □Uncertain □

Excision margins

Distance to nearest peripheral ..... mm Clear □Involved □(*In situ* □or invasive □)

Distance to nearest deep ..... mm Clear □Involved □(*In situ* □or invasive □)

Comments

Pathological staging (excision specimens only) TNM Microstage pT .....

Signature ..... Date reported ...../...../..... SNOMED Code T01000

M80703

CUTANEOUS MALIGNANT MELANOMA HISTOPATHOLOGY REPORT
Surname ..... Fore(first)names ..... Date of birth ..... Sex.....
Referring organisation..... Hospital no ..... NHS no .....
Date received..... Date reported..... Report no.....
Reporting organisation.....Authorising pathologist..... Referring clinician.....

Specimen

Clinical site (primary diagnosis).....

Specimen type Excision ☐Incisional (diagnostic) biopsy ☐Punch biopsy ☐ Shave ☐Curettings ☐
Uncertain/other ☐(Please specify) .....

Gross description

Size of specimen Length ..... mm Breadth ..... mm Depth ..... mm
Maximum diameter of lesion ..... mm Uncertain ☐
Nodule Absent ☐Present ☐Breadth .....mm Height .....mm
Border of lesion Regular ☐Irregular ☐
Pigmentation of lesion Uniform ☐Variable ☐

Histology

Lentigo maligna ☐Superficial spreading ☐Nodular ☐
Acral lentiginous ☐Desmoplastic ☐Neurotropic ☐
Other (specify) ☐

Growth phase

In situ ☐Invasive ☐
Radial growth phase ☐Vertical growth phase (VGP) ☐
Breslow thickness ..... mm Clark level I II III IV V
Ulceration Yes (maximum diameter..... mm) ☐No ☐
Lymphatic/blood vessel invasion Yes ☐No ☐Uncertain ☐
Perineural invasion Yes ☐No ☐
Regression Yes ☐No ☐
Microsatellites Yes ☐No ☐
Co-existent naevus Yes ☐No ☐Uncertain ☐Dysplastic: Yes ☐No ☐
Mitotic rate (VGP only) ..... per mm2
Tumor infiltrating lymphocytes (VGP) Absent ☐Nonbrisk ☐Brisk ☐

Excision margins

Distance to nearest peripheral ..... mm Clear ☐Involved ☐(*In situ* ☐or invasive ☐)
Distance to nearest deep ..... mm Clear ☐Involved ☐(*In situ* ☐or invasive ☐)

Comments

Pathological staging (excision specimens only) TNM Microstage pT .....
Signature ..... Date reported ...../...../..... *SNOMED Code T01000*
M87202 (in situ)
M87203 (invasive)