Answers to Dermato-venereological Quiz on pages 87-88

1. The clinical differential diagnoses included benign conditions, such as melanocytic nevus and seborrheic keratosis; malignant conditions, such as melanoma and pigmented basal cell carcinoma.

2. Histopathological section shows large, irregular junctional nests of atypical melanocytes at the rete ridges and focally extending down to the follicular epithelium. These nests are of different sizes and show focal confluence at the dermal-epidermal junction. The atypical melanocytes have large, hyperchromatic nuclei and prominent nucleoli. Mitotic figures are occasionally seen. Upward melanin pigment incontinence into the keratin layer is noted. On immunohistochemical staining, the atypical melanocytes show homogeneous positivity for Melan-A, Ki-67 and HMB-45. The findings are in keeping with a superficial spreading melanoma.

3. The diagnosis is acralentiginous melanoma.

4. The initial treatment of primary melanoma is complete excision with a 2-3 mm margin of healthy tissue. It is followed by a radial excision with margins depending on the Breslow thickness of the melanomas which is measured vertically in millimetres from the top of the granular layer to the deepest point of tumour involvement. It is a strong predictor of outcome; the thicker the melanoma, the more likely it is to metastasize. The excision margins is measured from the edge of the melanoma according to the Breslow thickness as follows:

   Melanoma in situ — excision margin 5 mm

   Melanoma <1.0 mm — excision margin 1 cm

   Melanoma 1.0-2.0 mm — excision margin 1-2 cm

   Melanoma 2.0-4.0 mm — excision margin 1-2 cm

   Melanoma >4.0 mm — excision margin 2 cm

   A flap or graft may be required to close the wound. Further surgery or radiotherapy may be considered to ensure complete removal of melanoma

Staging of cutaneous melanoma

Classification	Thickness (mm)	Ulceration status/mitoses
T		
Tis	NA	NA
T1	≤1.00	a: Without ulceration and mitosis <1/mm^2
		b: With ulceration or mitoses ≥1/mm^2
T2	1.01–2.00	a: Without ulceration
		b: With ulceration
T3	2.01–4.00	a: Without ulceration
		b: With ulceration
T4	>4.00	a: Without ulceration
		b: With ulceration

	No. of metastatic nodes	Nodal metastatic burden
N		
N0	0	NA
N1	1	a: Micrometastasis *
		b: Micrometastasis †
N2	2–3	a: Micrometastasis *
		b: Micrometastasis †
		c: In transit metastases/satellites without metastatic nodes
N3	4+ metastatic nodes, or matted nodes, or in transit metastases/satellites with metastatic nodes	

	Site	Serum LDH
M		
M0	No distant metastases	NA
M1a	Distant skin, subcutaneous, or nodal metastases	Normal
M1b	Lung metastases	Normal
M1c	All other visceral metastases	Normal
	Any distant metastasis	Elevated

	Clinical stage grouping			Pathological stage grouping		
	T	N	M	T	N	M
O	Tis	N0	M0	Tis	N0	M0
IA	T1a	N0	M0	T1a	N0	M0
IB	T1bT2a	N0N0	M0M0	T1bT2b	N0N0	M0M0
IIA	T2bT3a	N0N0	M0M0	T2bT3a	N0N0	M0M0
IIB	T3bT4a	N0N0	M0M0	T3bT4a	N0N0	M0M0
IIC	T4b	N0	M0	T4b	N0	M0
III	Any T Any T Any T	N1N2N3	M0M0M0			
IIIA				T1-4aT1-4a	N1aN2a	M0M0
IIIB				T1-4bT1-4bT1-4aT1-4aT1-4a/b	N1aN2aN1bN2bN2c	M0M0M0M0M0
IIIC				T1-4bT1-4bAny T	N1bN2bN3	M0M0M0
IV	Any T	Any N	M1	Any T	Any N	M1

NA = not applicable; LDH = lactate dehydrogenase; * Micrometastasis is diagnosed after sentinel lymph node biopsy; † Micrometastasis is defined as clinically detectable nodal metastases confirmed pathologically.