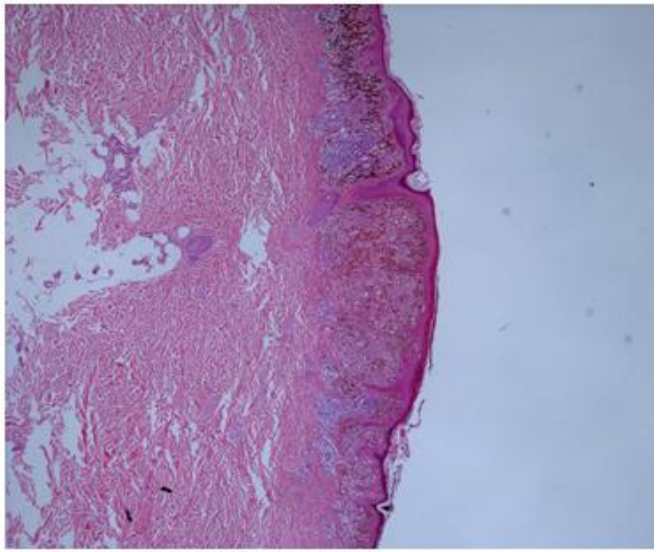
Case 11

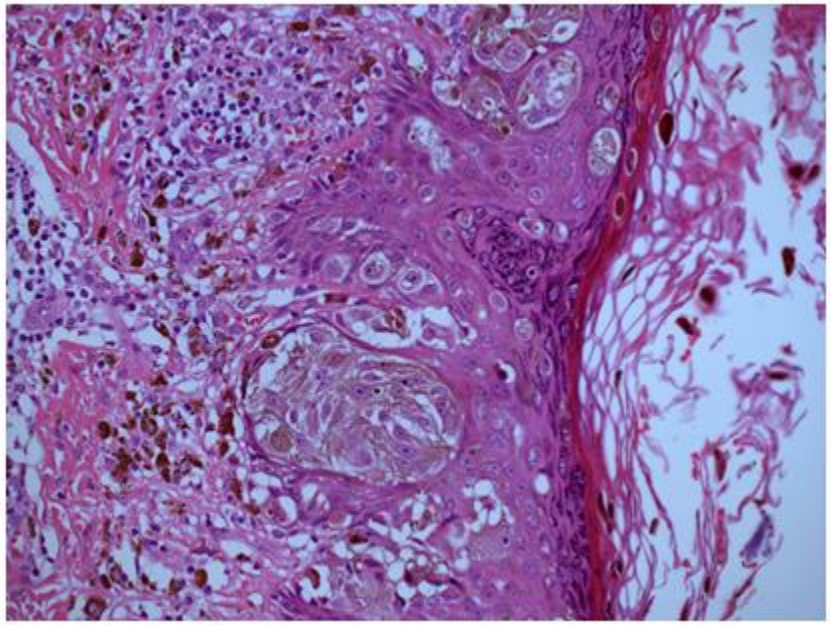
- LJ1

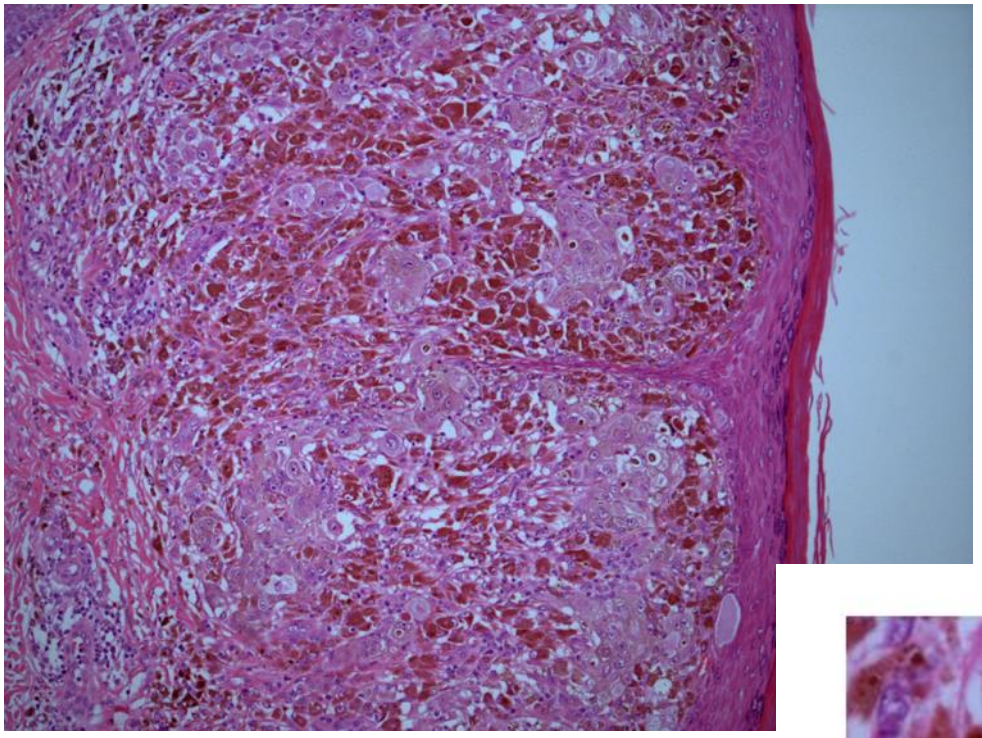
- - 59yo black mole on left side back noted 10/7 ago H/O sun bed use in the

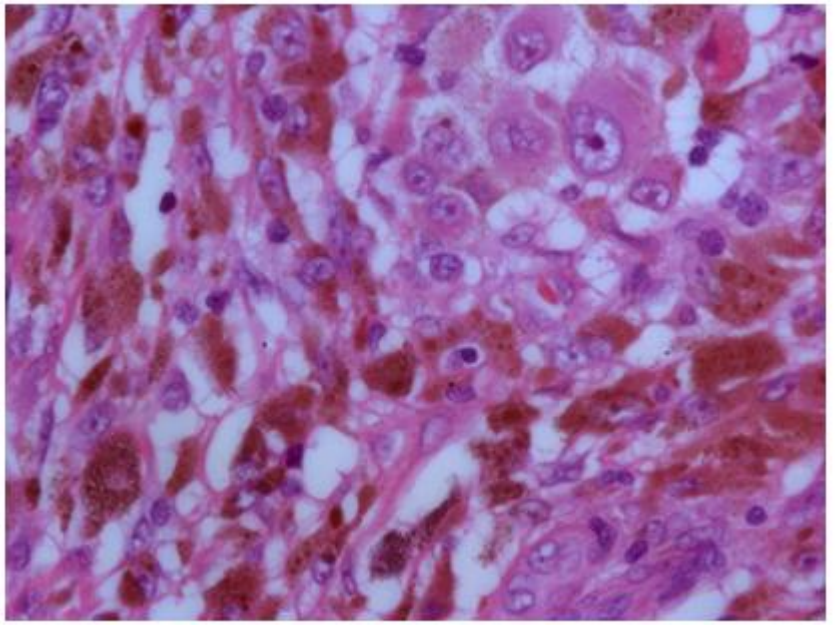
Case 11

- Malignant melanoma









LJ1

- Clinical History: 59yo black mole on left side back noted 10/7 ago H/O sun bed use in the
- Histology- Malignant melanoma, superficial spreading type, with a measured thickness of 0.9 mm.
- No lymph nodes identified on clinical examination

Answer Options:

- 1) This is a dysplastic naevus
- 2) Patient has an estimated 5 year survival of 95%
- 3)The pathological stage is pT1a
- 4) Clinical stage is stage IIc
- 5) This is a Spitz naevus

AJCC 8th Edition

- To be implemented in January 2018, to allow time for clinical practices to adapt
- Introduces few major and some minor changes to the staging of melanoma compared to the 7th edition
- Survival data are not yet published, but may be released as part of an online tool that uses complicated algorithms to calculate patient survival

Key changes in Melanoma staging -8th edition

Definition of primary tumor (T)

All principal T-category tumor thickness ranges are maintained,

- but T1 is now subcategorized by tumor thickness - at 0.8-mm threshold
- Tumor mitotic rate is removed as a staging criterion for T1 tumors:
- T1a melanomas are now defined as nonulcerated and <0.8 mm in thickness;
- T1b is now defined as melanomas 0.8-1.0 mm in thickness regardless of ulceration status OR ulcerated melanomas <0.8 mm in thickness

- Key changes in the eighth edition AJCC Cancer Staging Manual :

- T0 definition has been clarified:

T0 should be used to designate when there is no evidence of a primary tumor or that the site of the primary tumor is unknown (eg, in a patient who presents with an axillary metastasis with no known primary tumor); staging may be based on the clinical suspicion of the primary tumor with the tumor categorized as T0 (Tis, not T0, designates melanoma in situ)

- Tumor thickness measurements are now recorded to the nearest 0.1 mm,

not the nearest 0.01 mm, but should be reported rounded to the nearest 0.1 mm (eg, melanomas measured to be anywhere in the range from 0.75 mm to 0.84 mm are reported as 0.8 mm in thickness [and hence T1b])

- Tis (melanoma in situ), T0 (no evidence of or unknown primary tumor), and TX (tumor thickness cannot be determined) may now be used as the T-category designation for stage groupings

Key changes in the eighth edition AJCC Cancer Staging Manual (Cont):

- pathological (but not clinical) stage IA is revised to include T1b N0 M0 (formerly pathologic stage IB);
- the N category descriptors "microscopic" and "macroscopic" for regional node metastasis are redefined as "clinically occult" and "clinically apparent";
- prognostic stage III groupings are based on N category criteria and T category criteria (ie, primary tumor thickness and ulceration) and increased from 3 to 4 subgroups (stages IIIA-IIID);
- definitions of N subcategories are revised, with the presence of microsatellites, satellites, or in-transit metastases now categorized as N1c, N2c, or N3c based on the number of tumor-involved regional lymph nodes, if any;
- descriptors are added to each M1 subcategory designation for lactate dehydrogenase (LDH) level (LDH elevation no longer upstages to M1c); and
- a new M1d designation is added for central nervous system metastases.

Case 1- Staging Melanoma

- Mitoses are no longer part of the T category. Ulceration remains.

- T1 category uses 0.8 mm as threshold with the introduction of a second T1b category defined as 0.8 – 1 mm with or without ulceration

Gershenwald J et al. "Melanoma of the Skin". Chapter in AJCC Cancer Staging Manual. 8th Ed. 2017.

Answer

According to the 7th edition of the AJCC,

- the patient is T1a, N0, M0 and is therefore Stage IA with an estimated 5 year survival of 95%.

- However, the 8th edition of the AJCC uses Breslow cutoff of 0.8 mm. and only considers ulceration for T staging.

- Therefore according to the new system, the patient will be T1b, N0, M0 falling into Stage IA.

Breslow thickness

Using a calibrated ocular micrometer at a right angle to the adjacent normal skin:

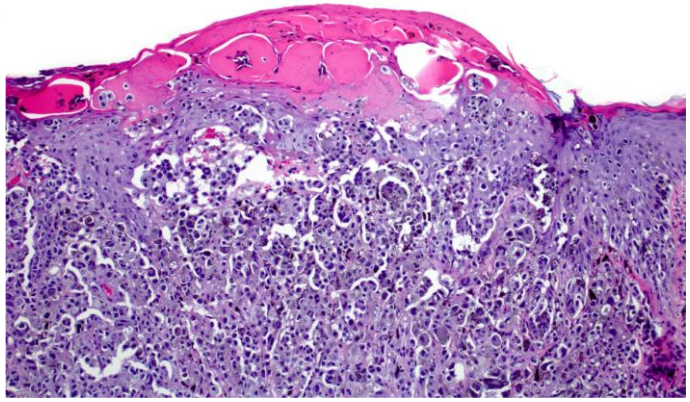
• The upper point of reference is:

–The granular layer of the epidermis of the overlying skin.

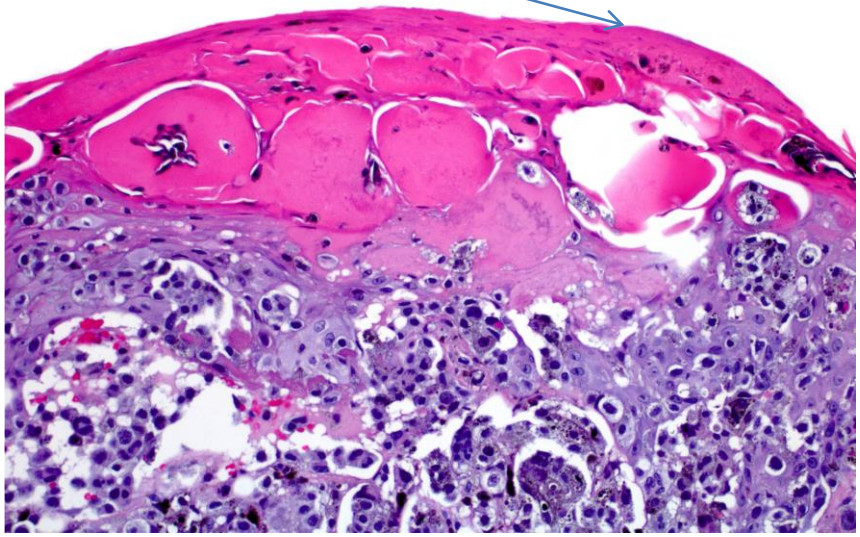
–In an ulcerated lesion use the base of the ulcer.

• The lower reference point is the deepest point of tumor invasion.

No Ulceration



Stratum corneum is preserved



True ulceration

Currently defined as the combination of:

– full-thickness epidermal defect

– evidence of reactive changes

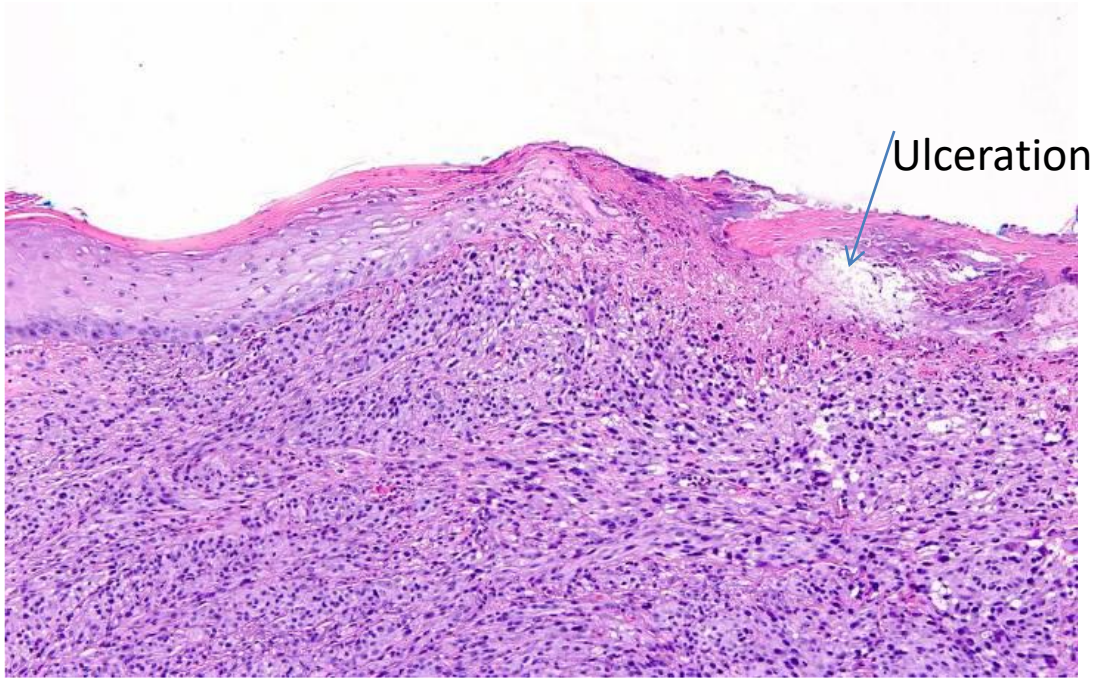
– thinning, effacement, or reactive hyperplasia of the surrounding epidermis without trauma or evidence of a recent surgical procedure

5 year survival decreased from 80% to 55% in Stage I/II; 53% to 12% in Stage III

Majority of melanomas > 4.0 mm are ulcerated

Width of ulcer > 6 mm. associated with even worse prognosis

Ulcerated tumors behave like non-ulcerated tumors of the next higher T category.

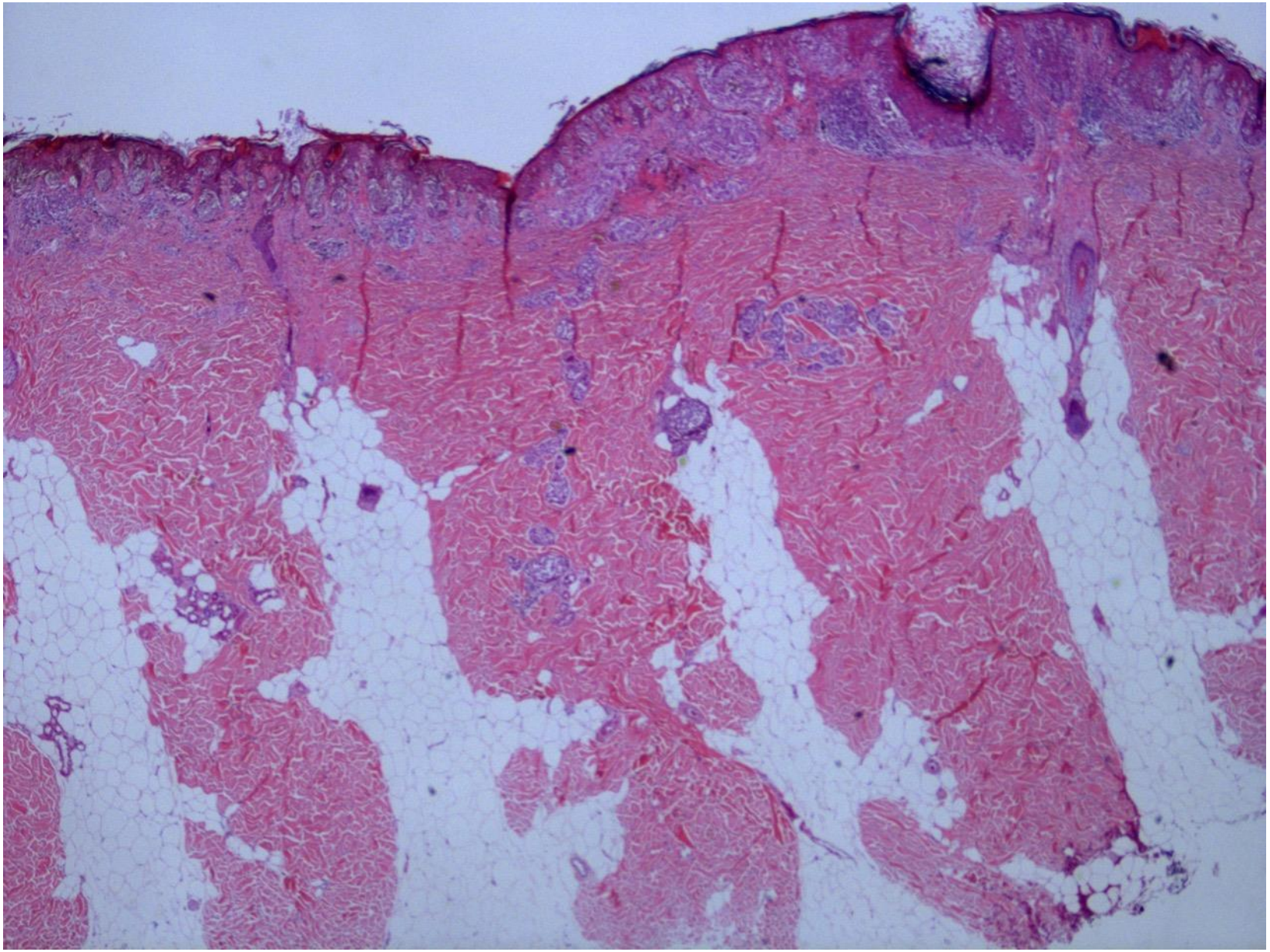


T category	Thickness	Ulceration status
Tx-Primary tumor thickness cannot be assessed (eg, diagnosis by curettage)	Not applicable	Not applicable
T0: No evidence of primary tumor (eg, unknown primary or completely regressed melanoma)	Not applicable	Not applicable
Tis (melanoma in situ)	Not applicable	Not applicable
T1	≤1.0 mm	Unknown or unspecified
T1a	<0.8 mm	Without ulceration
T1b	0.8-1.0 mm	With or without ulceration

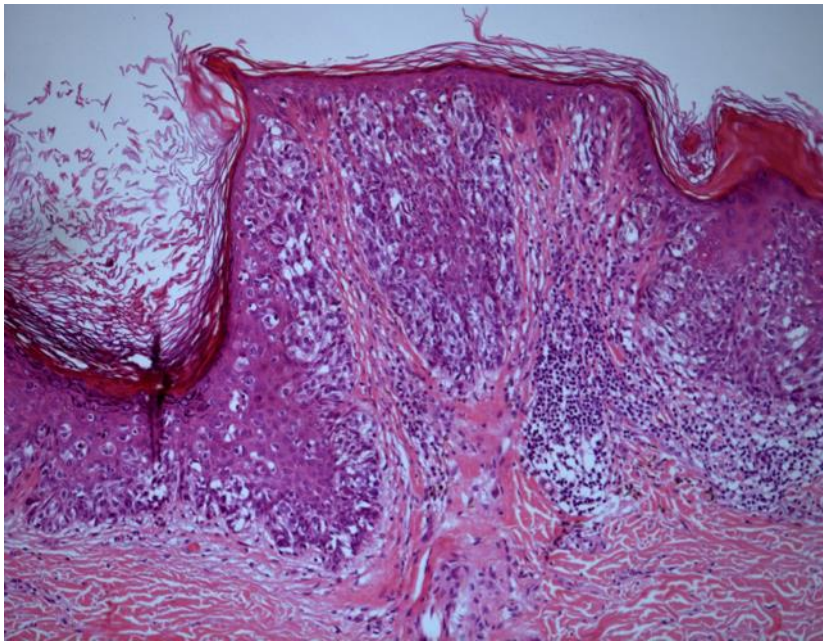
T Category	Thickness	ulceration
T2	>1.0-2.0 mm	Unknown or unspecified
T2a	>1.0-2.0 mm	Without ulceration
T2b	>1.0-2.0 mm	With ulceration
T3	>2.0-4.0 mm	Unknown or unspecified
T3a	>2.0-4.0 mm	Without ulceration
T3b	>2.0-4.0 mm	With Ulceration
T4	>4.0 mm	Unknown or unspecified
T4a	>4.0 mm	Without ulceration
T4b	>4mm	With ulceration

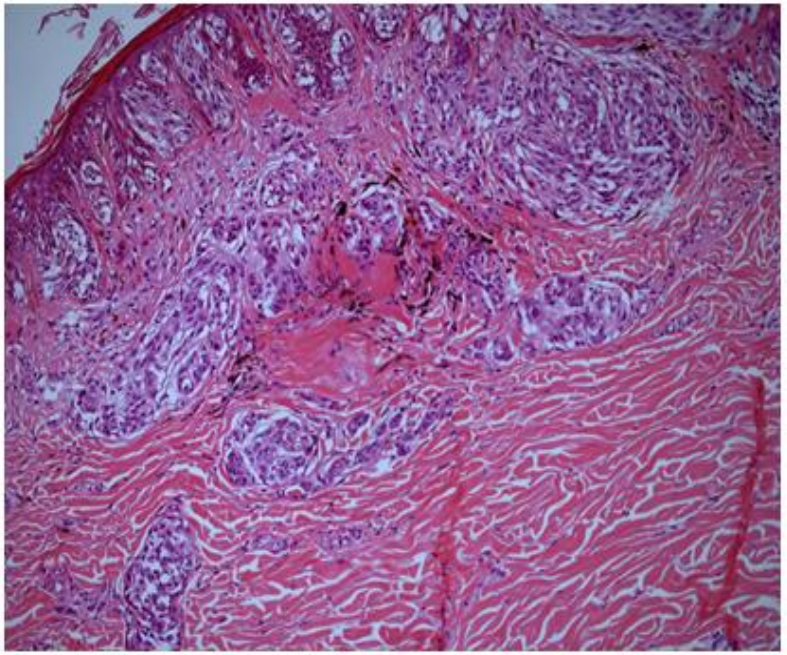
Case 16 LJ2 (4298)

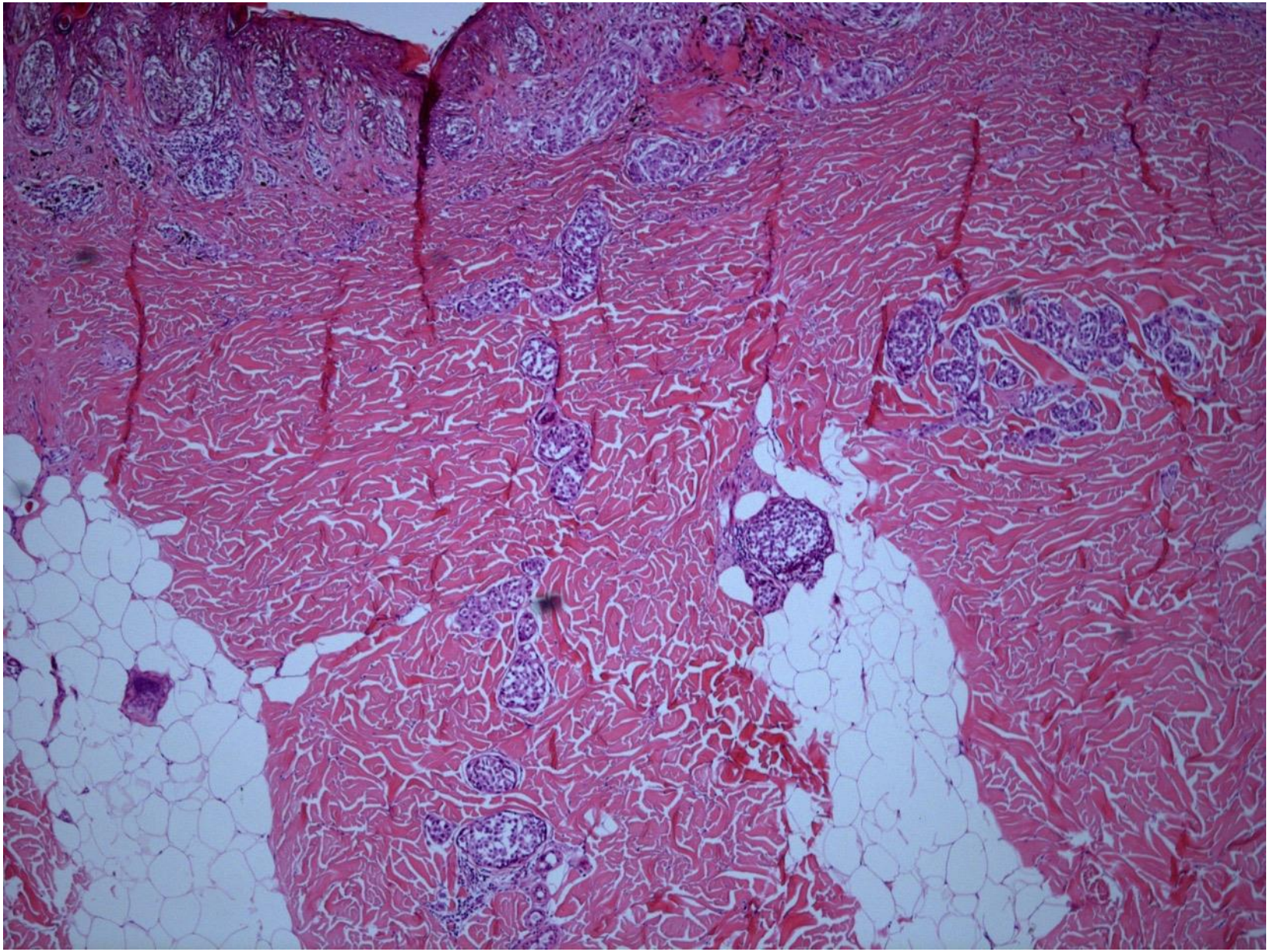
- LJ2- F 56 Irregular pigmented lesion back

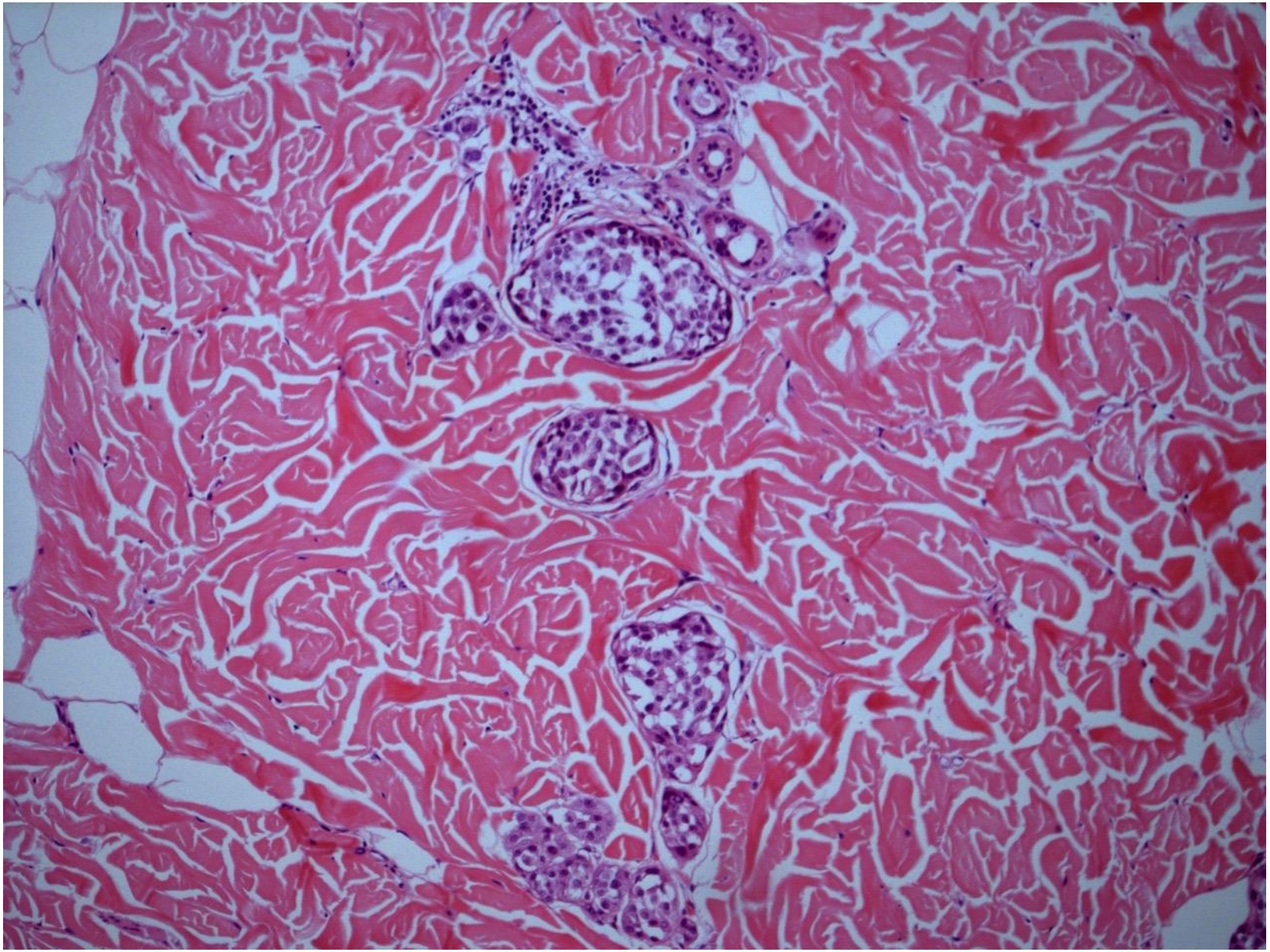


Case 12



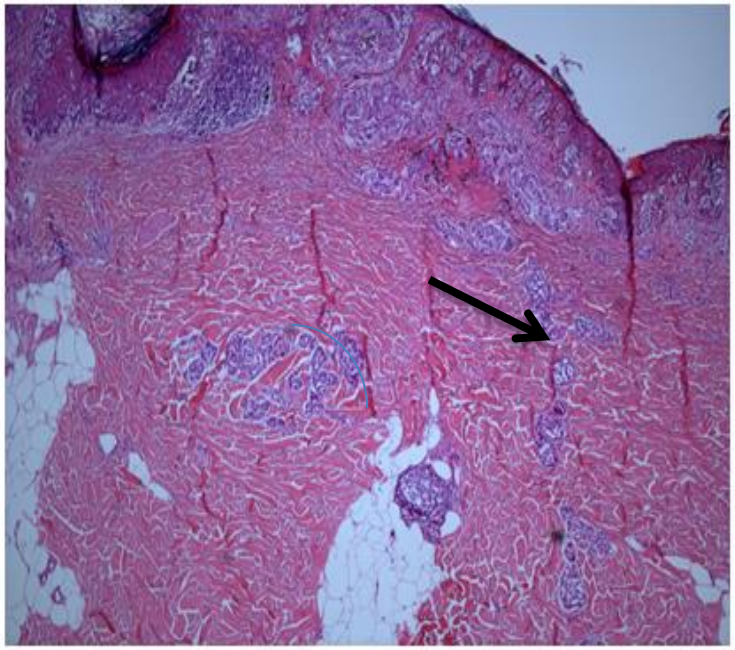




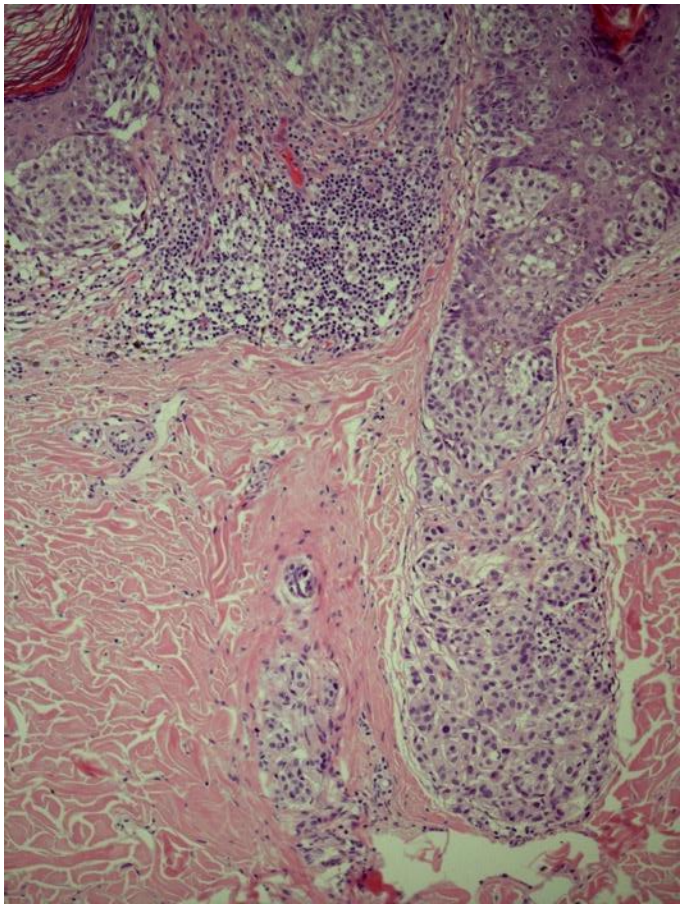


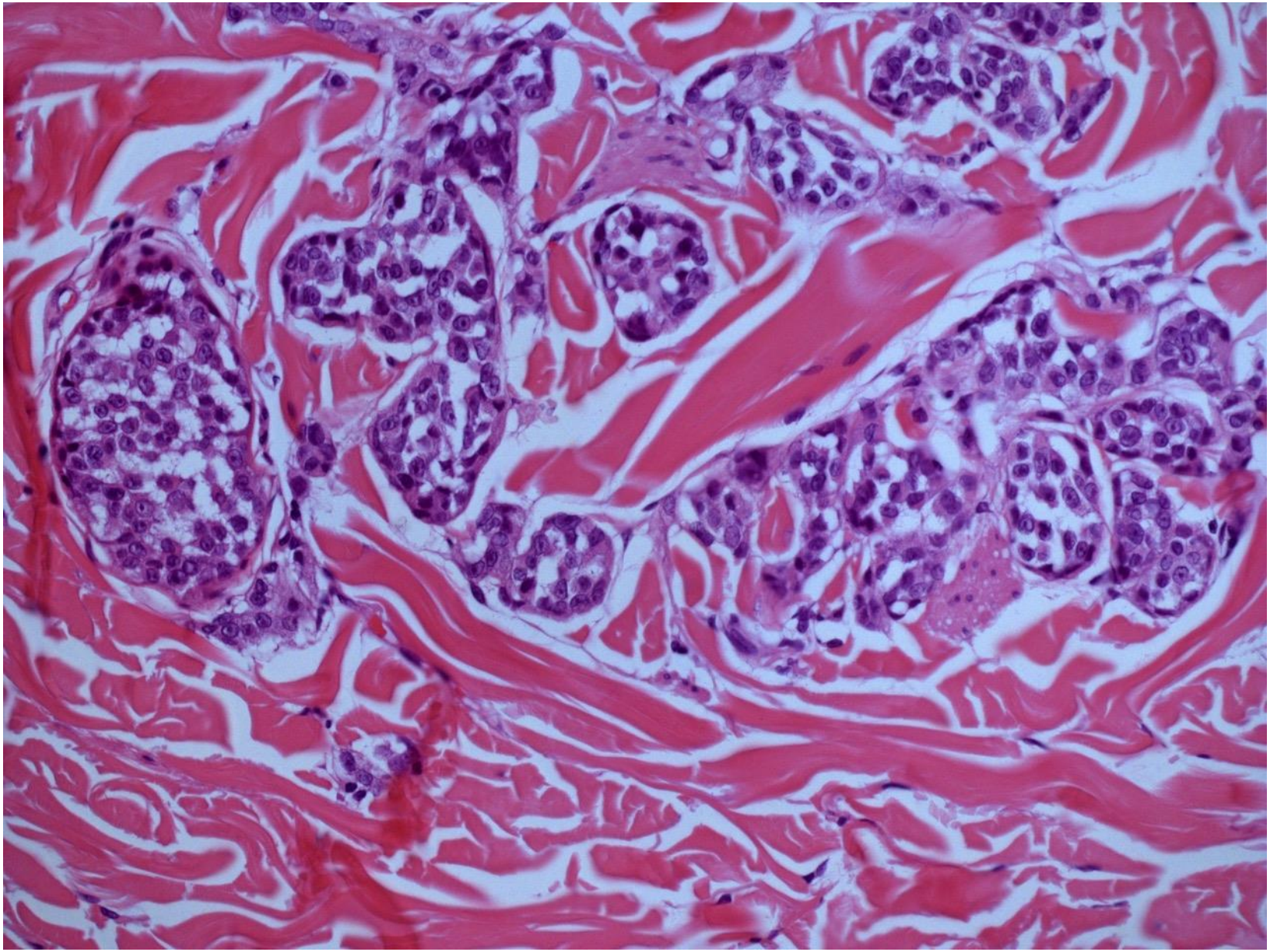
Microsatellite

1st H&E



Levels





Case 12- LJ2

- Clinical History: F 56 Irregular pigmented lesion back

1)Malignant melanoma with In transit metastasis

2) Malignant melanoma with satellite metastasis

3) Malignant melanoma with Microsatellite metastasis

4) Malignant melanoma In situ

5) Malignant melanoma with distant metastasis

Correct Diagnosis

Malignant melanoma with Microsatellite metastasis

Breslow thickness- Microsatellites should not be included in the measurement of tumor thickness.

- “Microsatellite”: “foci of metastatic tumor cells in the skin or subcutis adjacent or deep to but discontinuous from the primary tumor detected by microscopic examination of tissue”

- “Satellite Metastasis”: “Foci of clinically evident cutaneous and/or subcutaneous metastases occurring within 2 cm of but discontinuous from the primary melanoma”

- “In-Transit Metastasis”: “Clinically evident cutaneous and/or subcutaneous metastases occurring > 2 cm from the primary melanoma in the region between the primary and the regional lymph node basin”

- Any cutaneous metastasis that does not fall into the above categories is considered “Distant metastasis” and is staged under the M category

AJCC 8th Edition (2017) Proposed N

N category	Number of tumor-involved regional lymph node(s)	Presence of in-transit, satellite and/or microsatellite metastases
N0	No regional metastases detected	None
N1		
N1a	1 clinically occult (i.e., detected by SLN biopsy)	None
N1b	1 clinically detected	None
N1c	No regional lymph node disease	Yes

	Number of tumor-involved regional lymph node(s)	Presence of in-transit, satellite and/or microsatellite metastases
N2		
N2a	2-3 clinically occult (i.e., detected by SLN biopsy)	None
N2b	2-3, at least 1 of which clinically detected	None
N2c	1 clinically occult or clinically detected	YES
N3		
N3a	4 or more clinically occult (i.e., detected by SLN biopsy)	Yes
N3b	4 or more, at least 1 of which clinically detected, or presence of any number of matted nodes	None
N3c	2 or more clinically occult or clinically detected	YES