Dr Ben Tallon

Dermatologist

Tauranga

Optimal Diagnosis of Epidermal Lesionsy - Concurrent Workshop Repeated

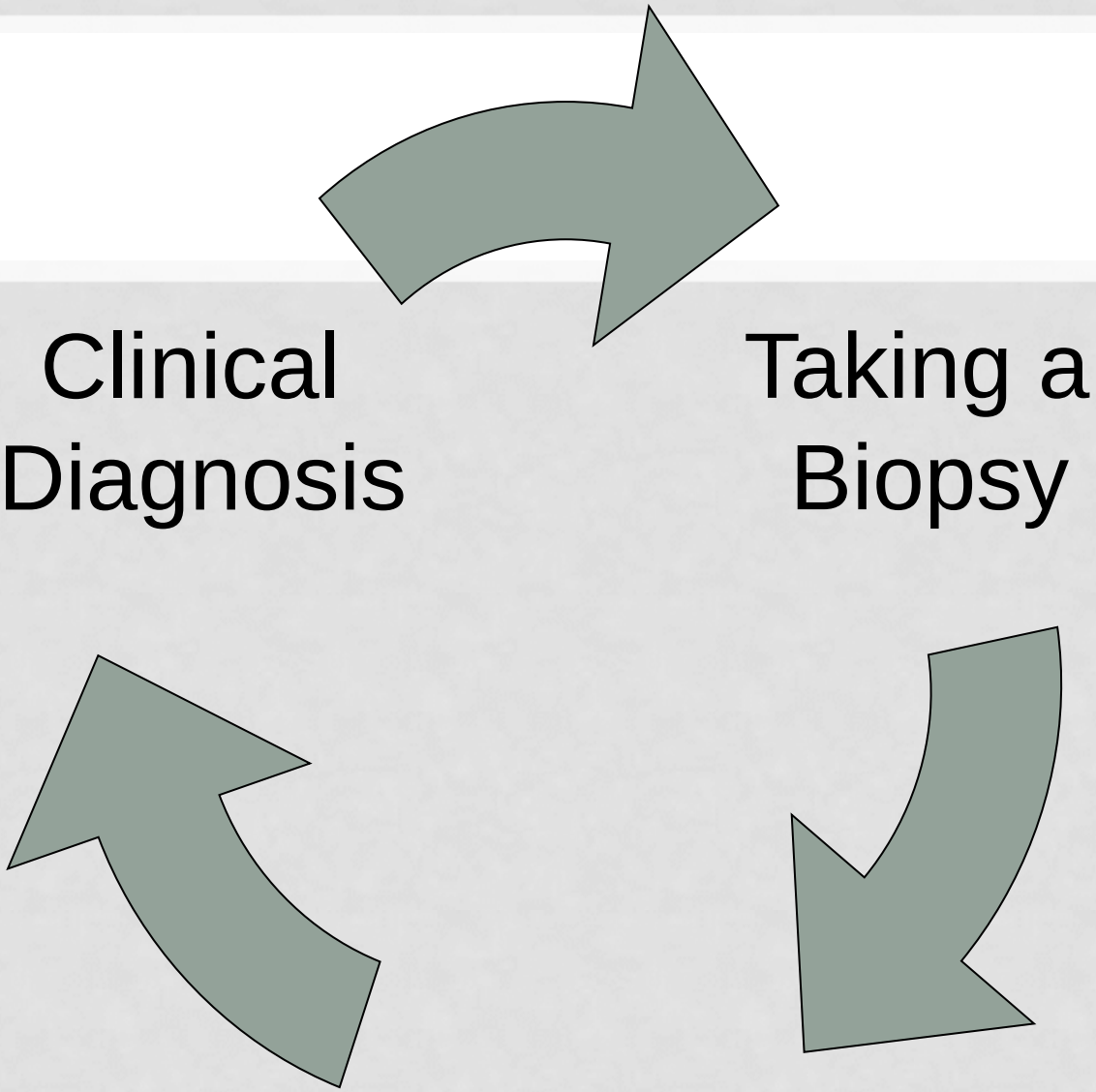
Saturday, 22 June 2013	Start 8:30am	Duration: 55mins	Skellerup
	Start 9:35am	Duration: 55mins	Skellerup

OPTIMISING DIAGNOSIS OF EPIDERMAL LESIONS

BEN TALLON

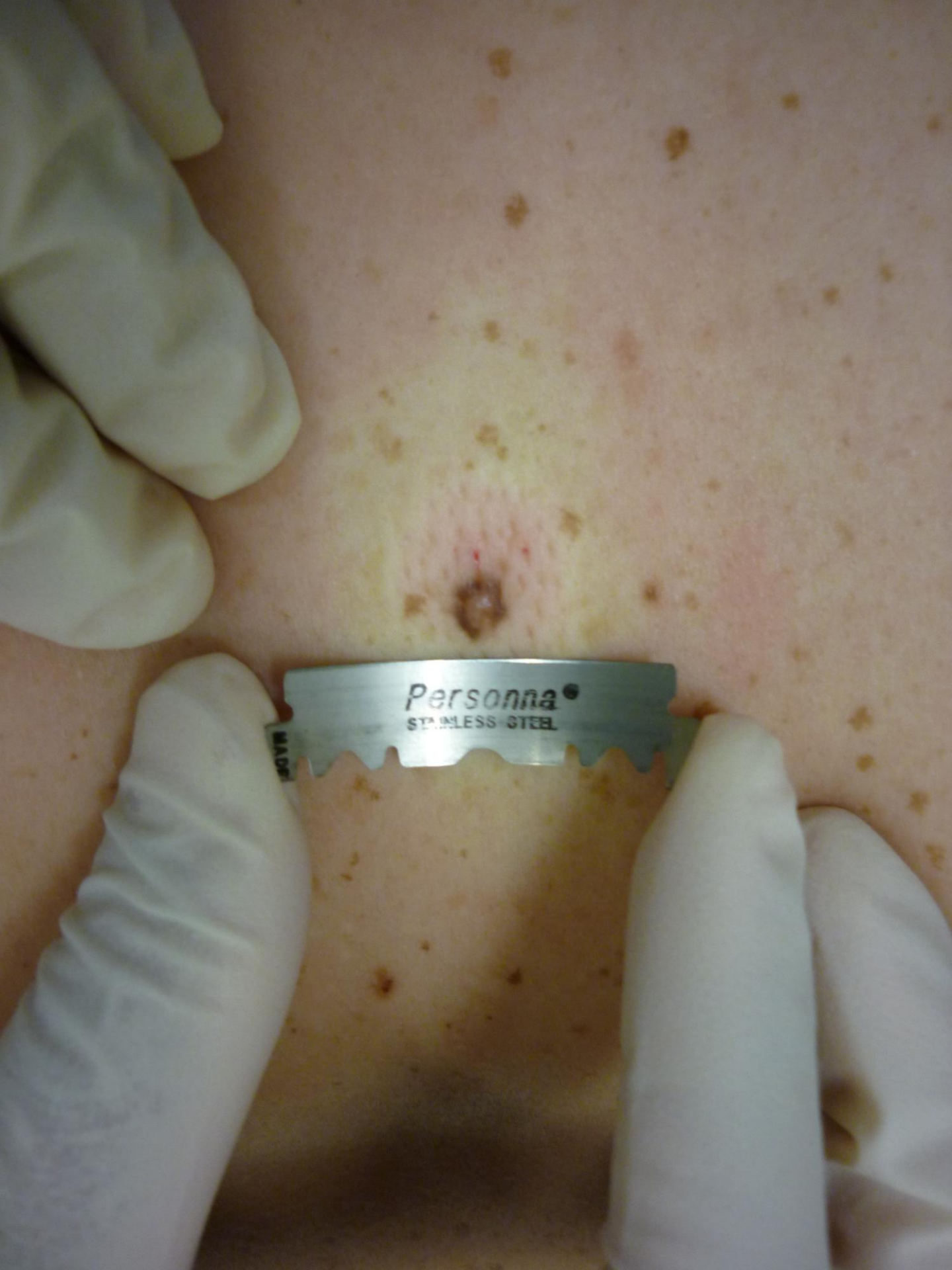
pathlab

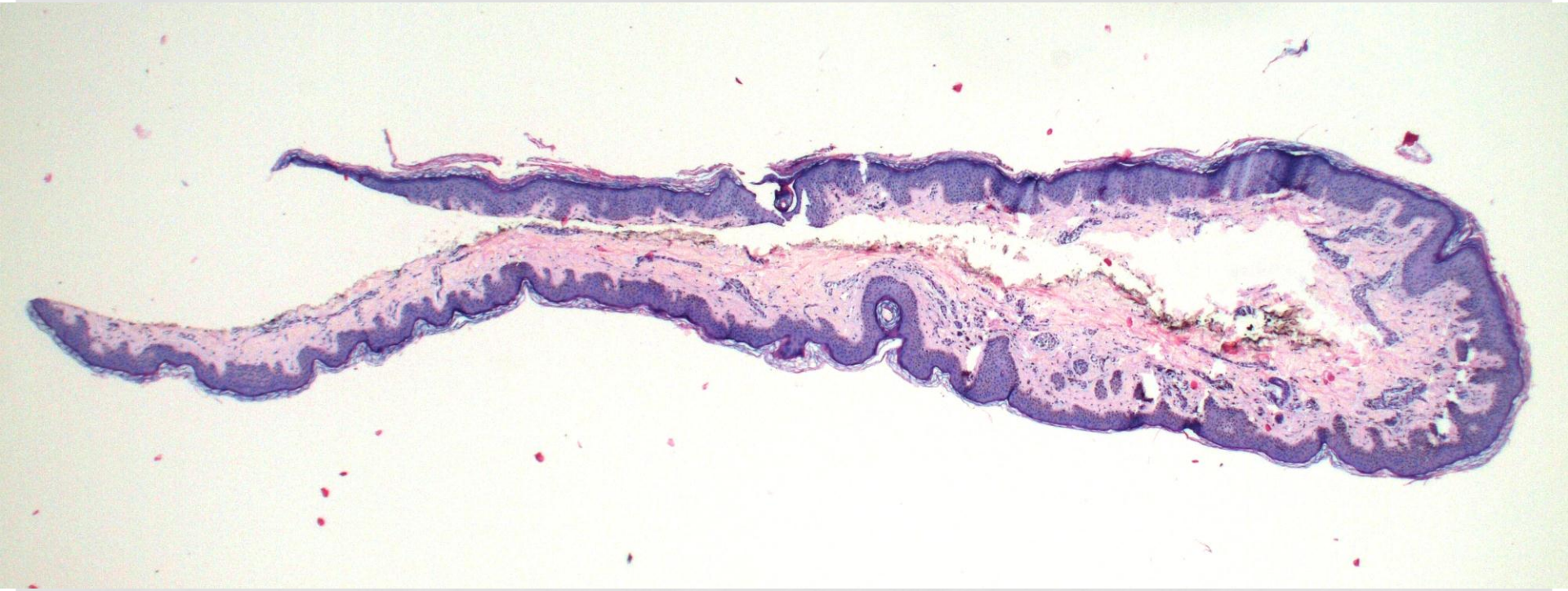
skin
Dermatology Institute

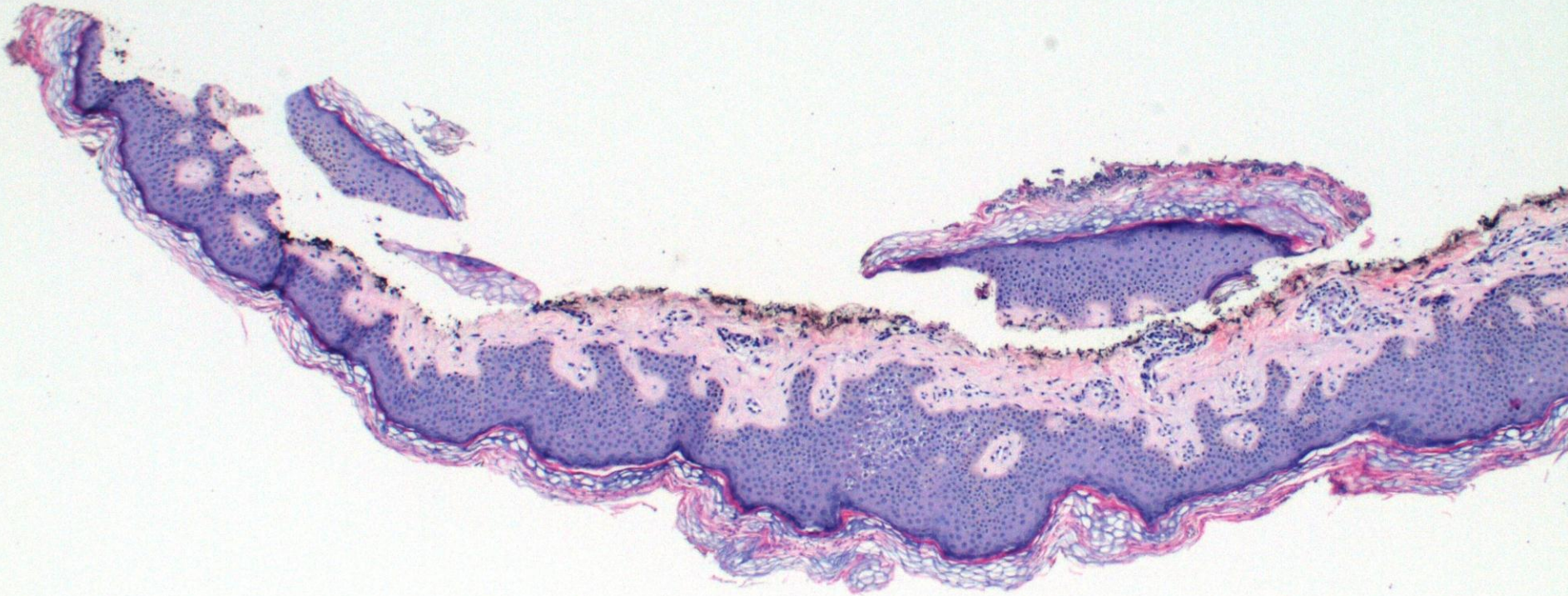

Clinical Diagnosis
Taking a Biopsy
Dermatopathology

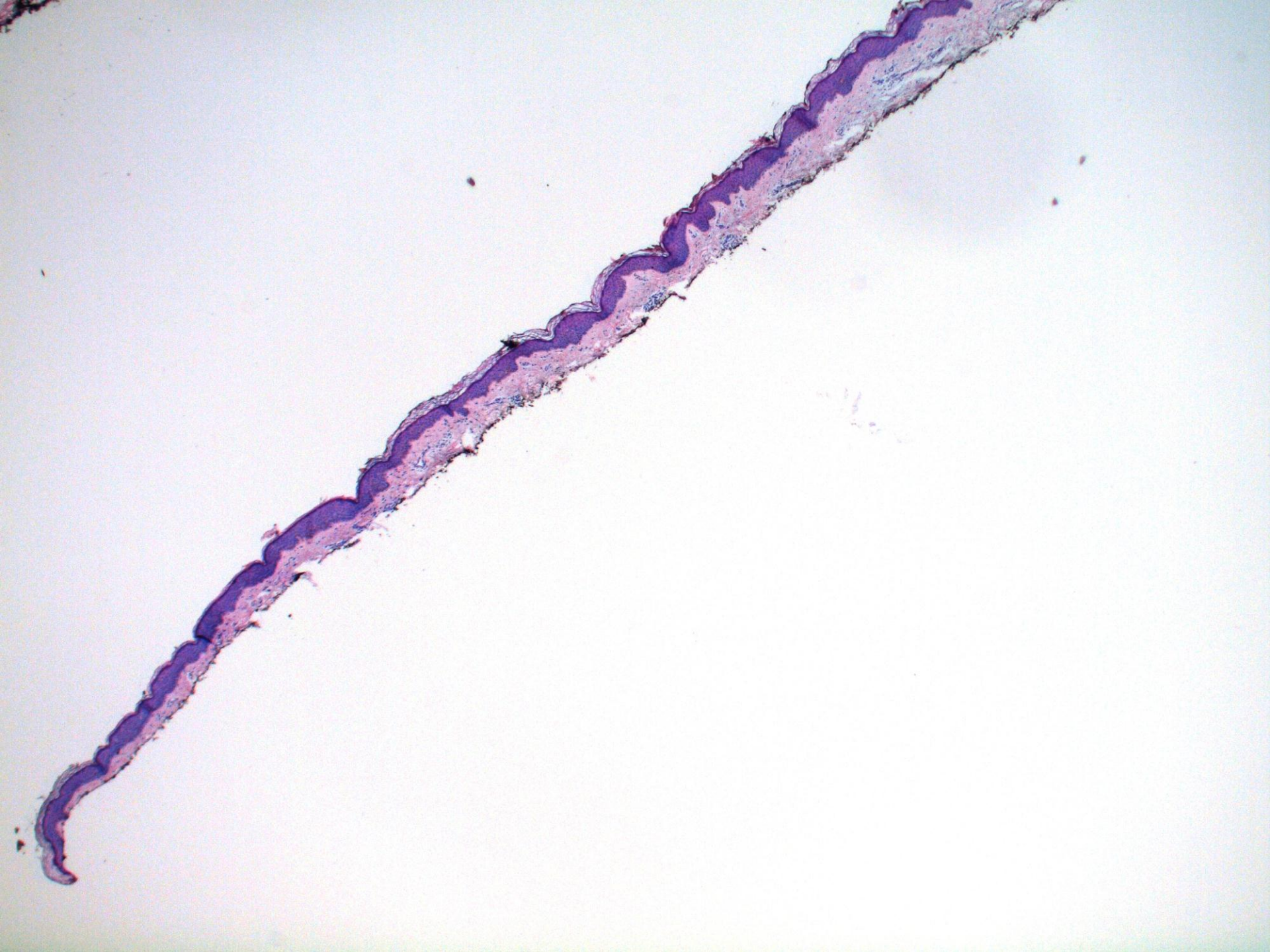
POINT 1

- Use cardboard for shave biopsies


Personna





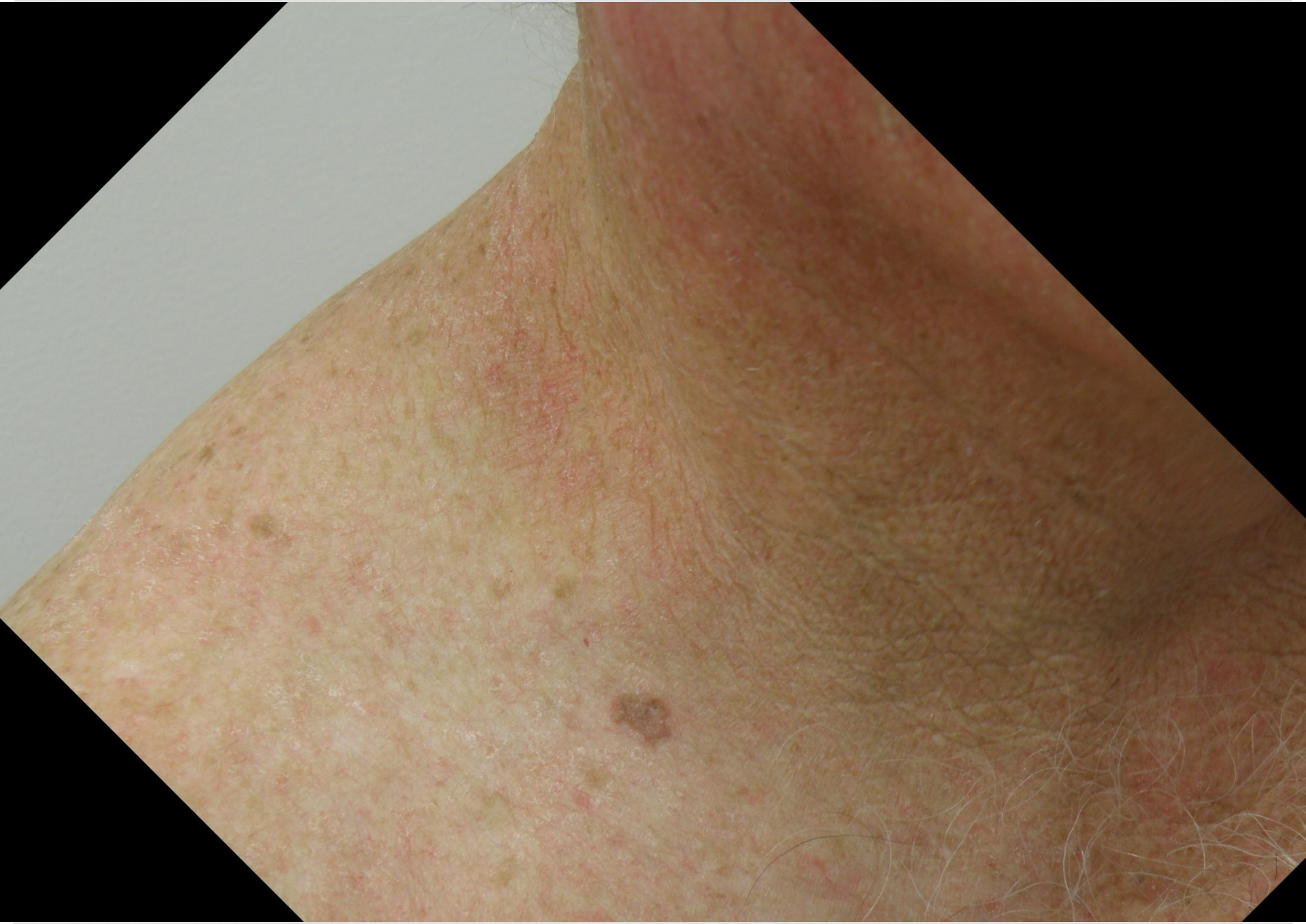


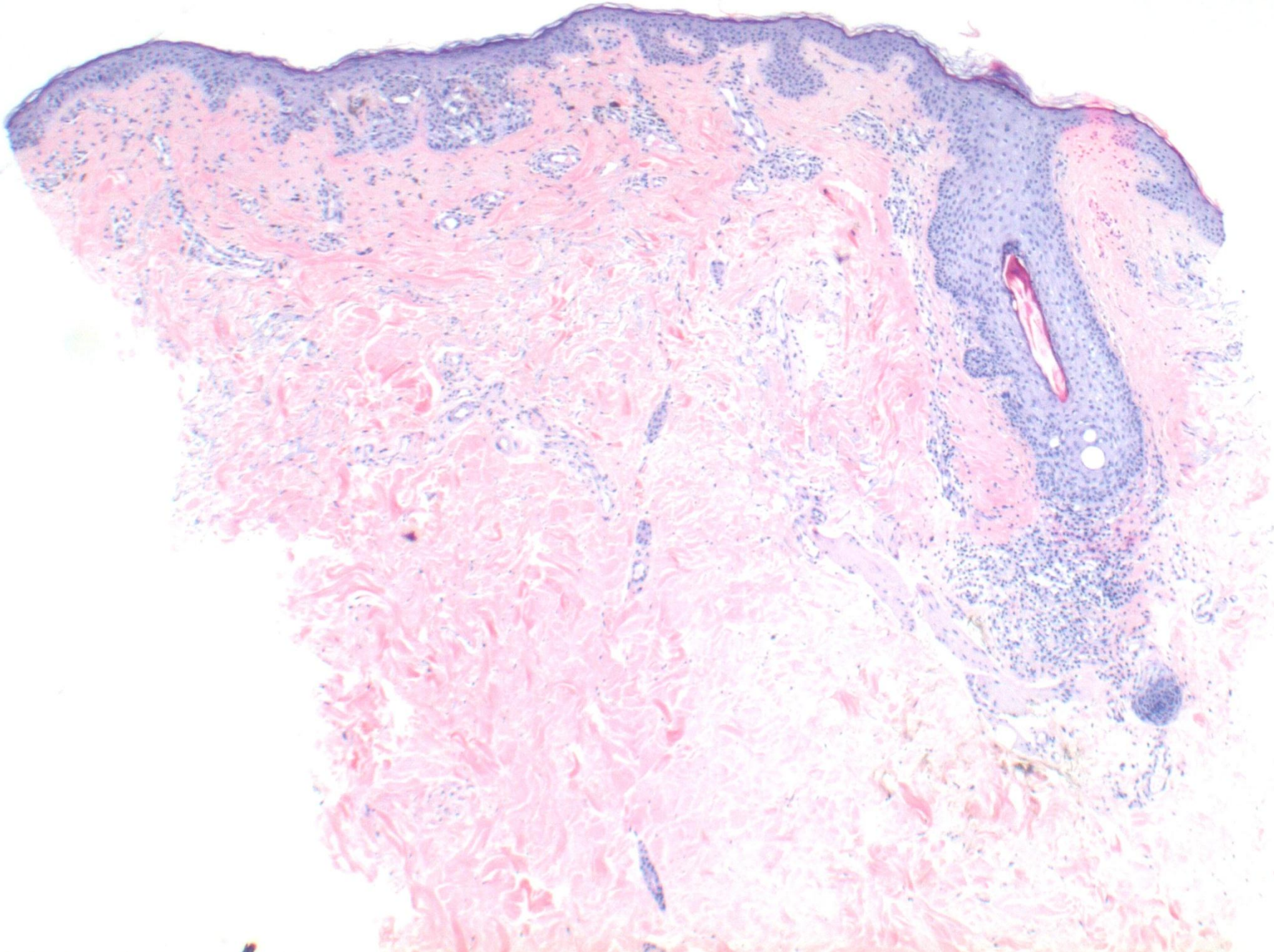
POINT 1

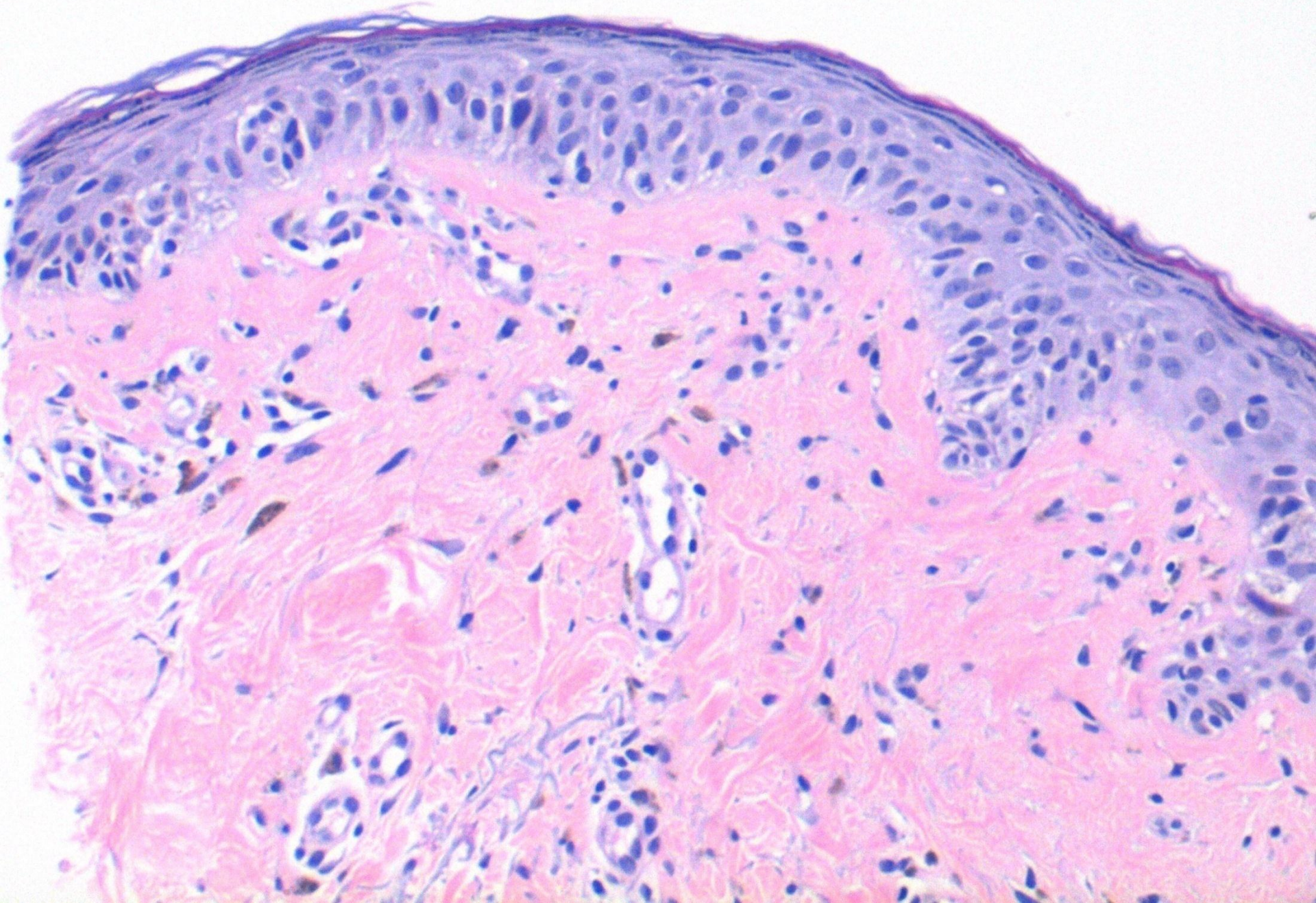
- Use cardboard for shave biopsies

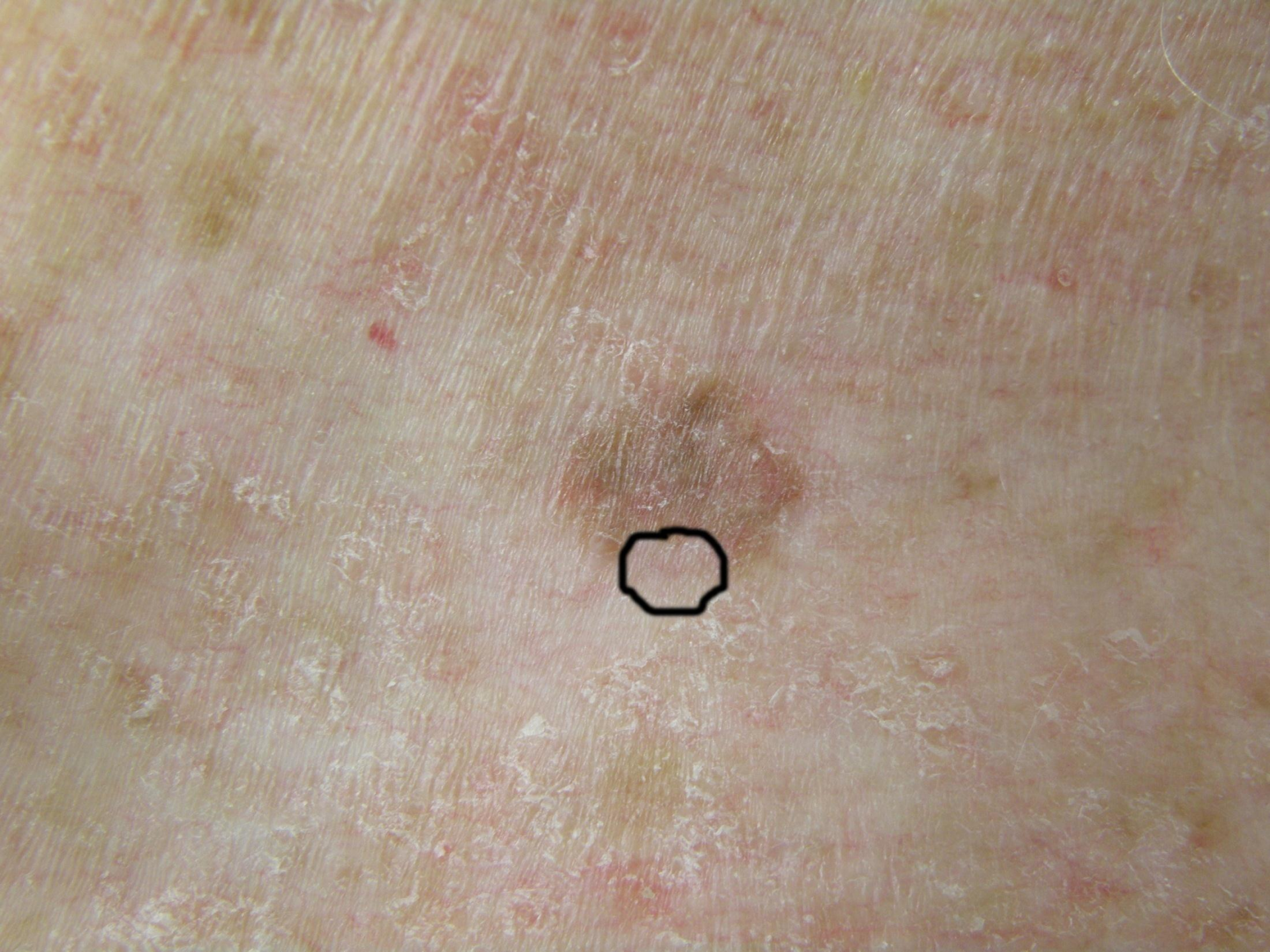
POINT 2

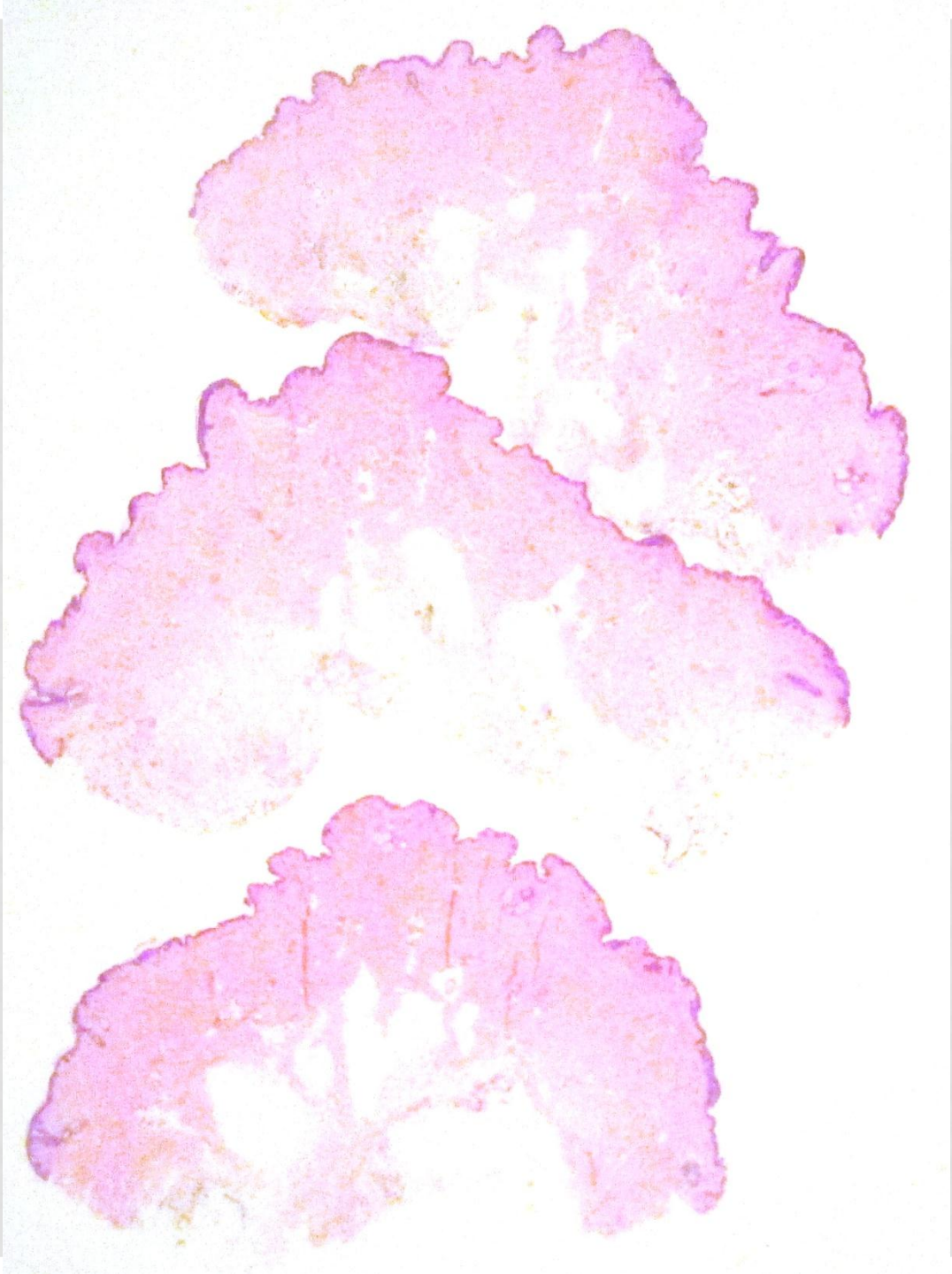
- Don’t punch biopsy part of a melanocytic lesion

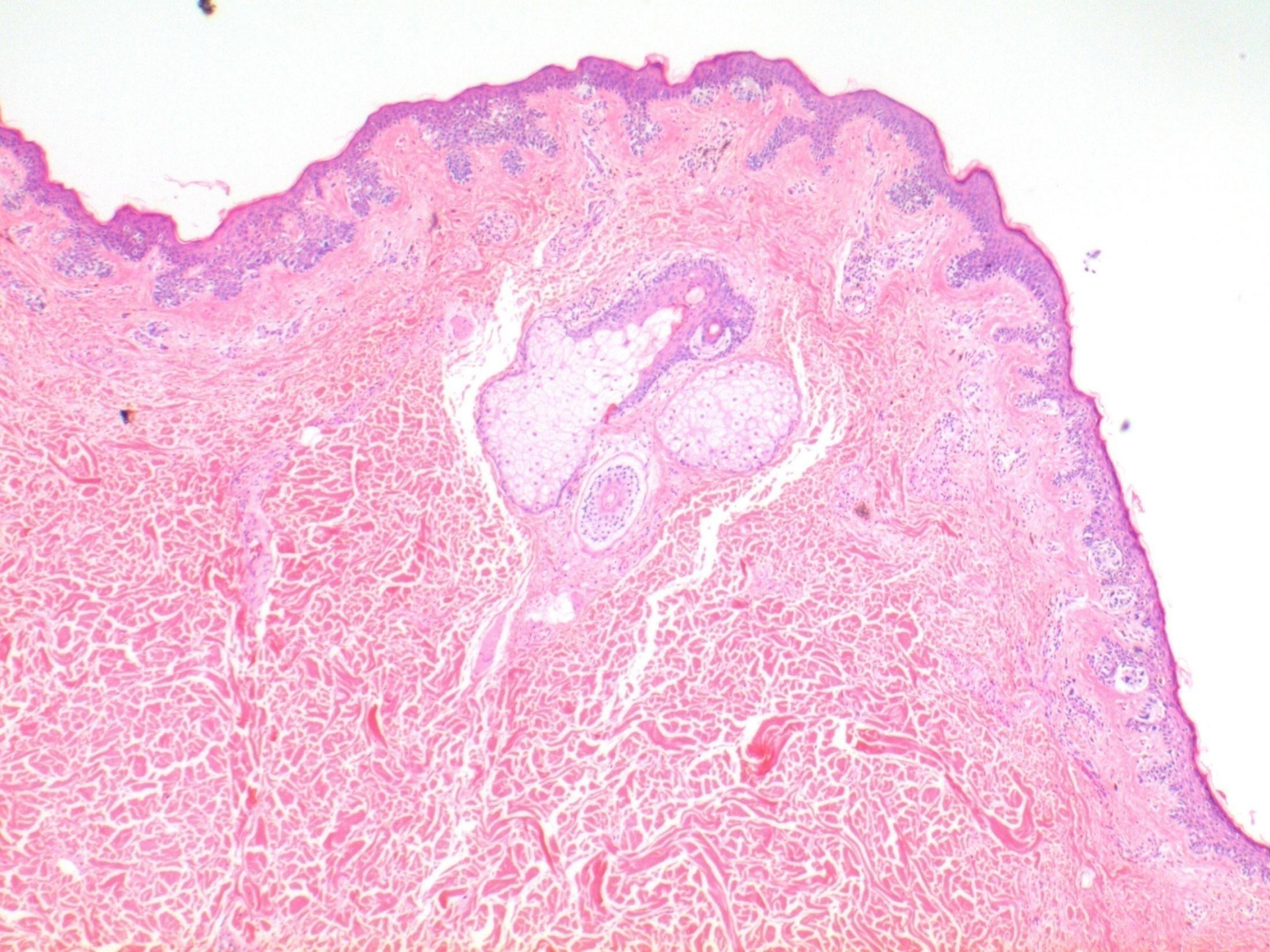


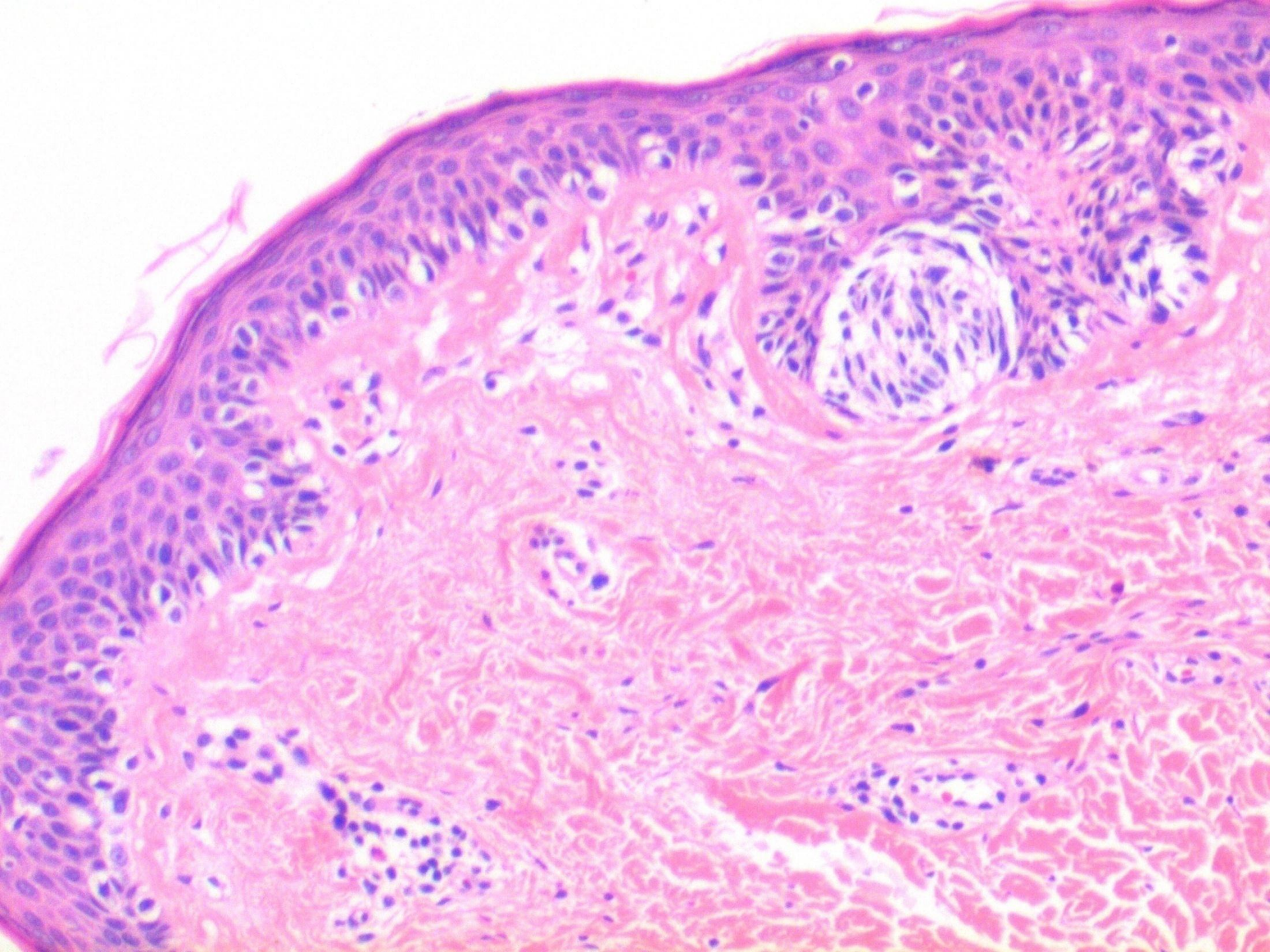












MELANOCYTIC LESIONS

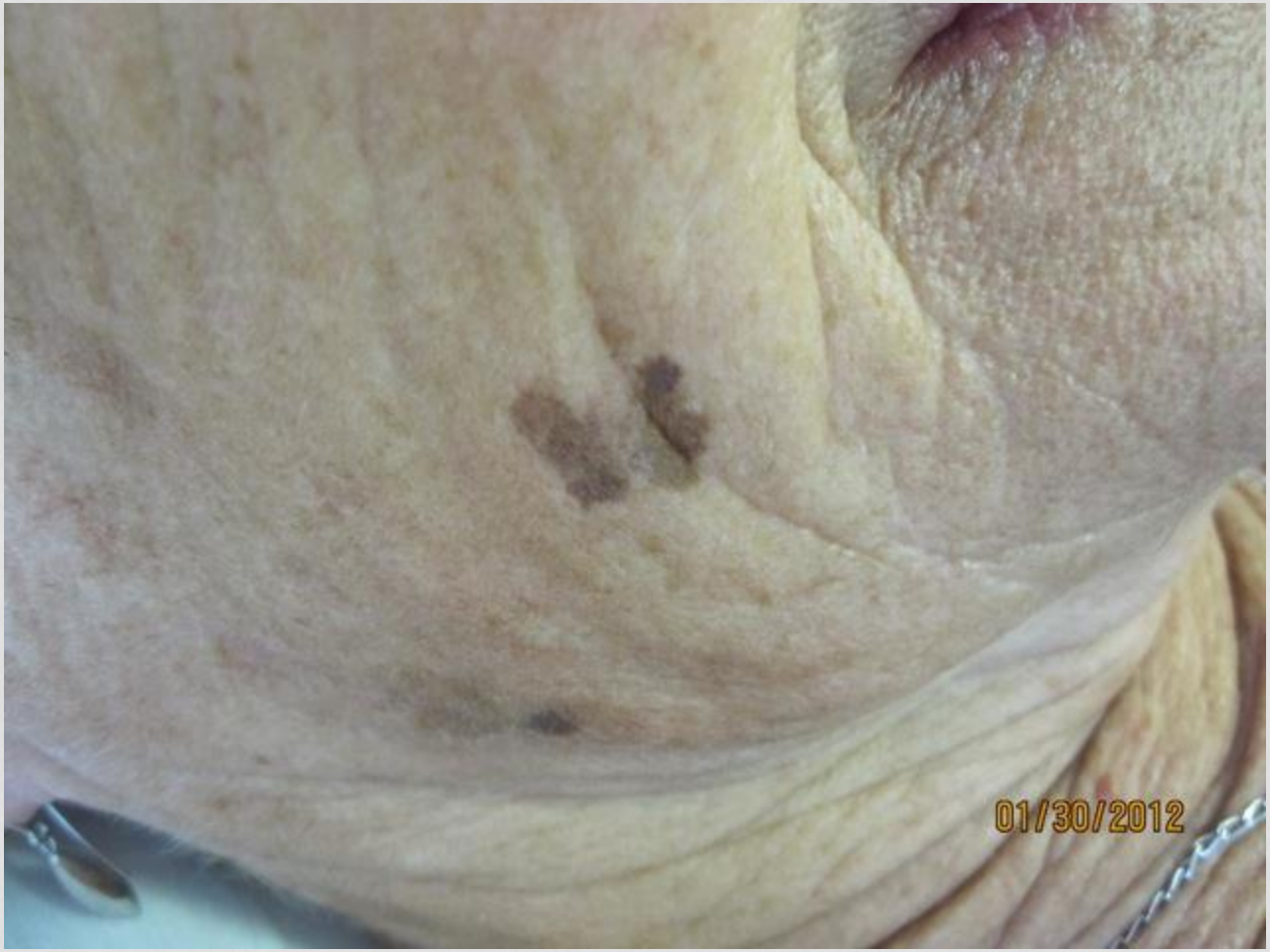
- Australasian Melanoma Guidelines
  - Excisional biopsy 2mm margin

POINT 2

- Don’t punch biopsy part of a melanocytic lesion

POINT 3

- Take incisional biopsy through area of highest yield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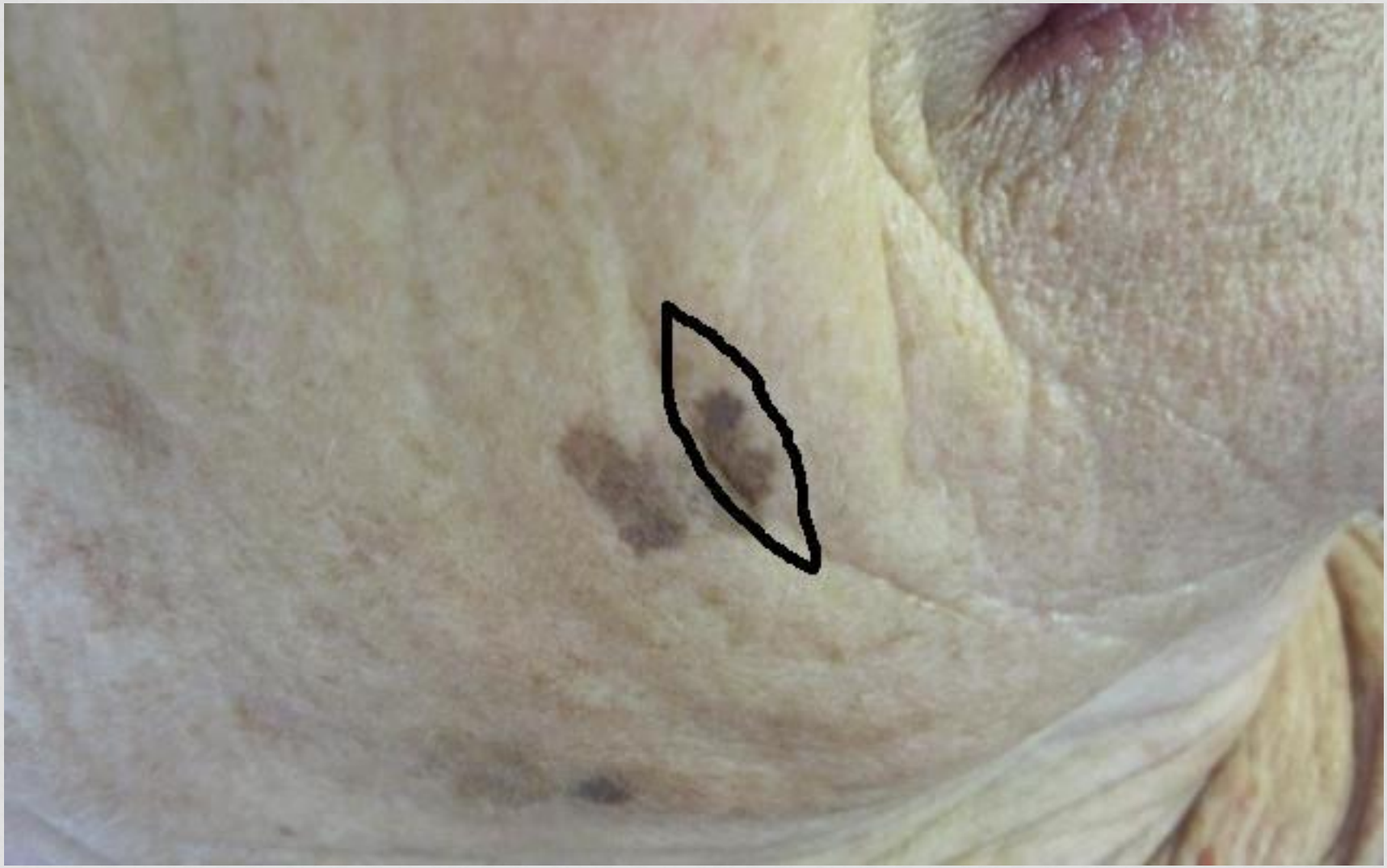
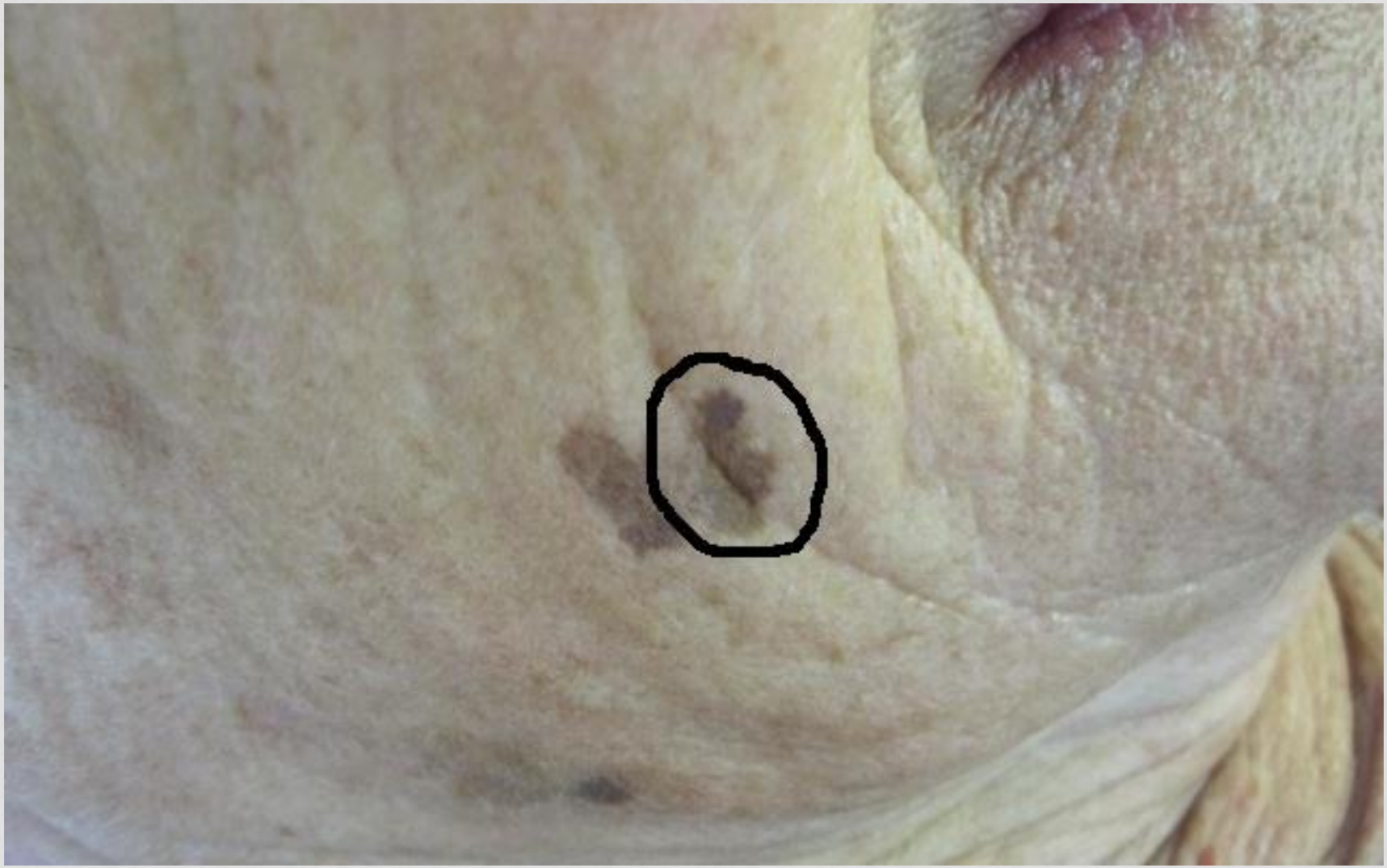
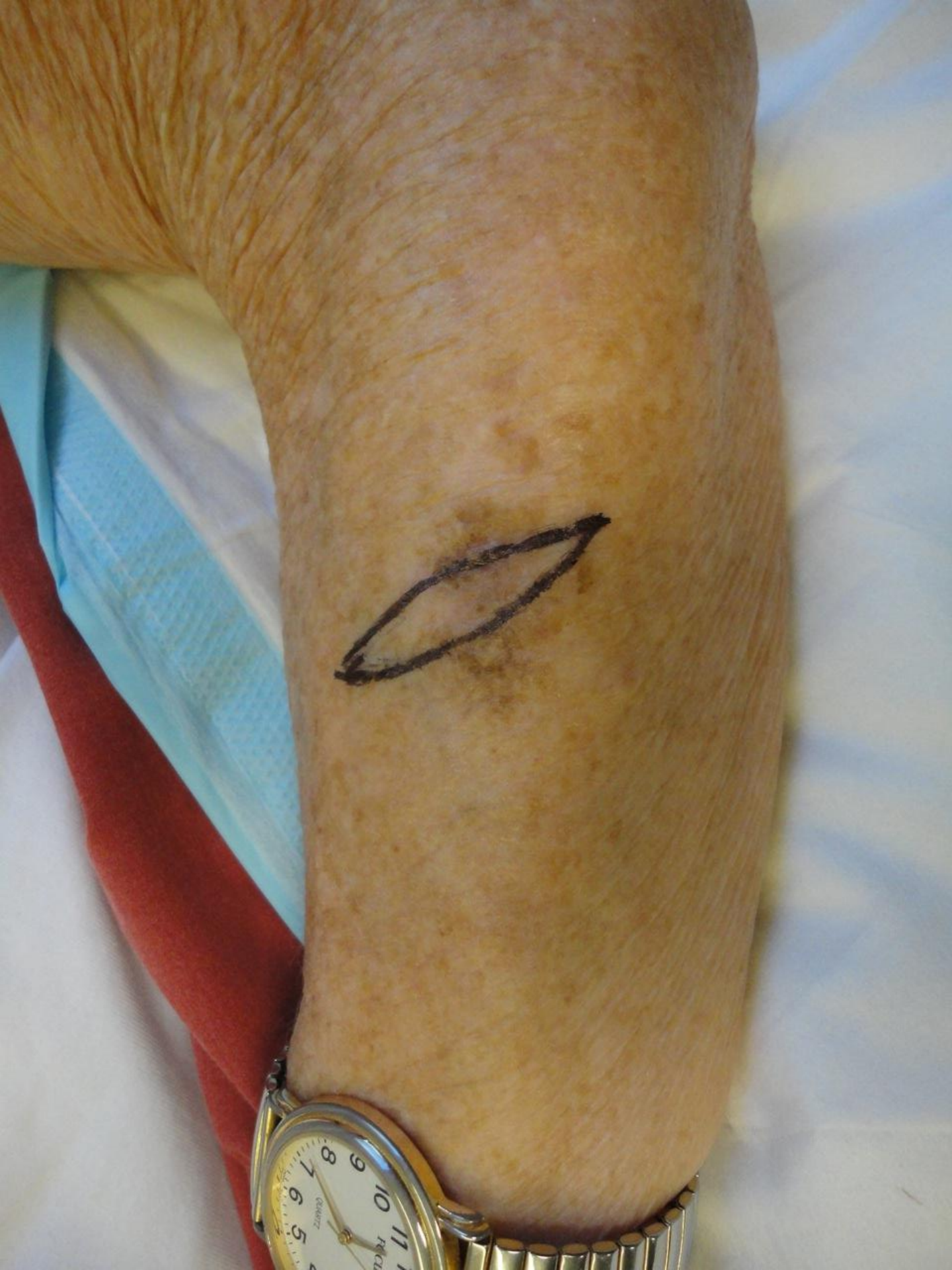






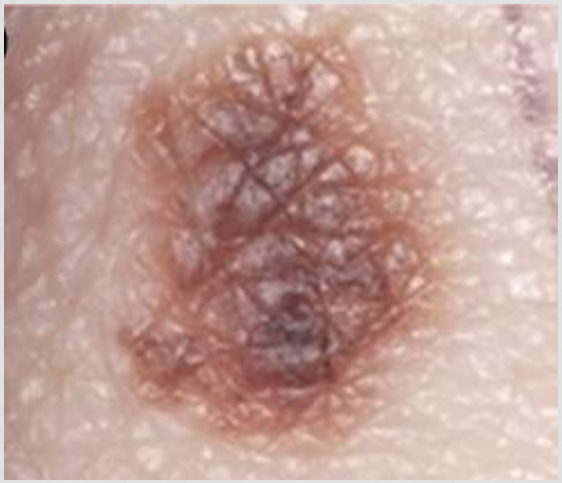
- If the report is not what you expect then take another biopsy

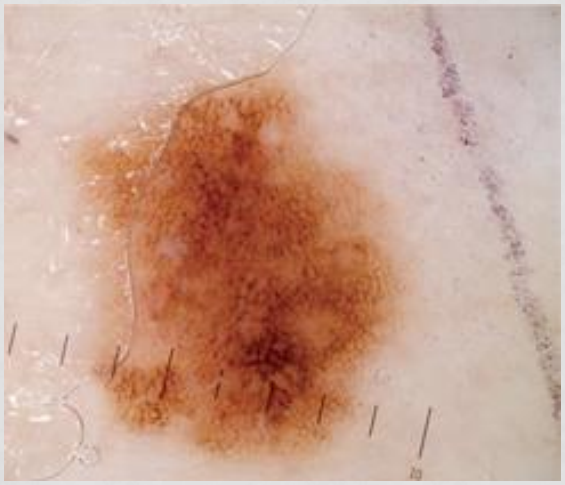
POINT 3

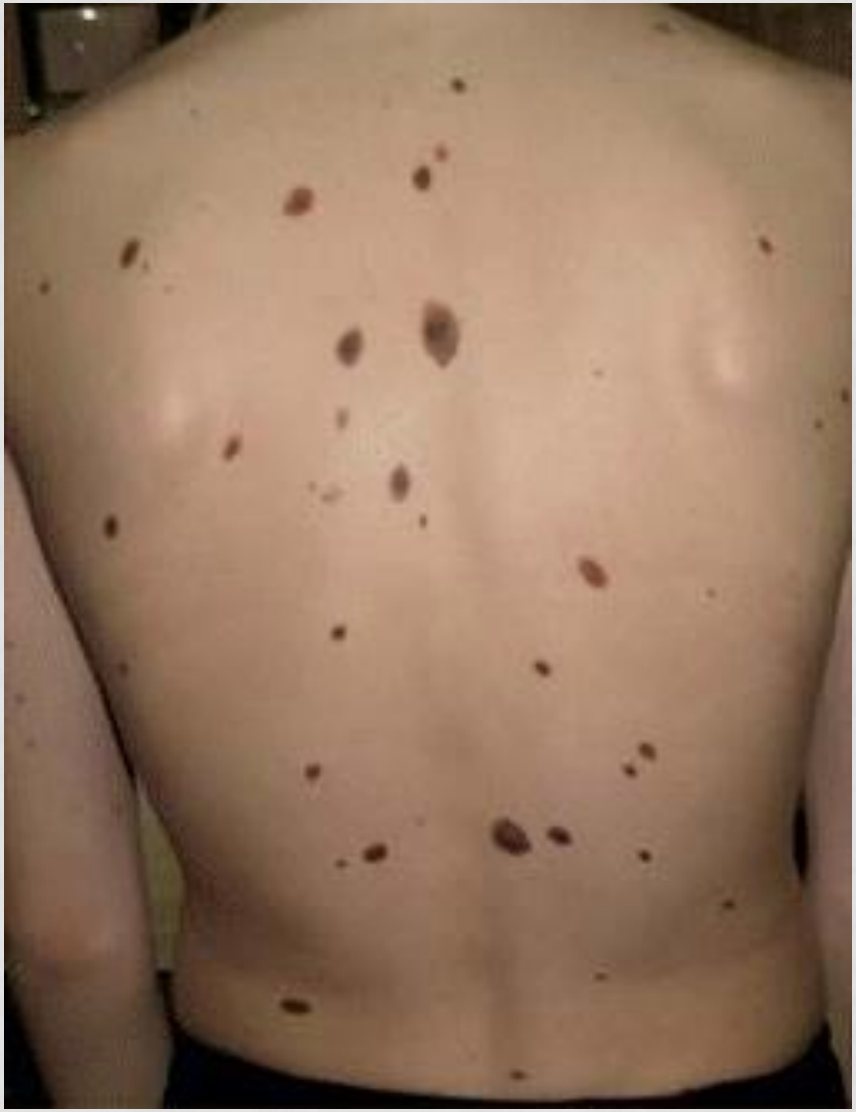
- Take incisional biopsy through area of highest yield

POINT 4

- Inspect the whole patient if atypical mole present

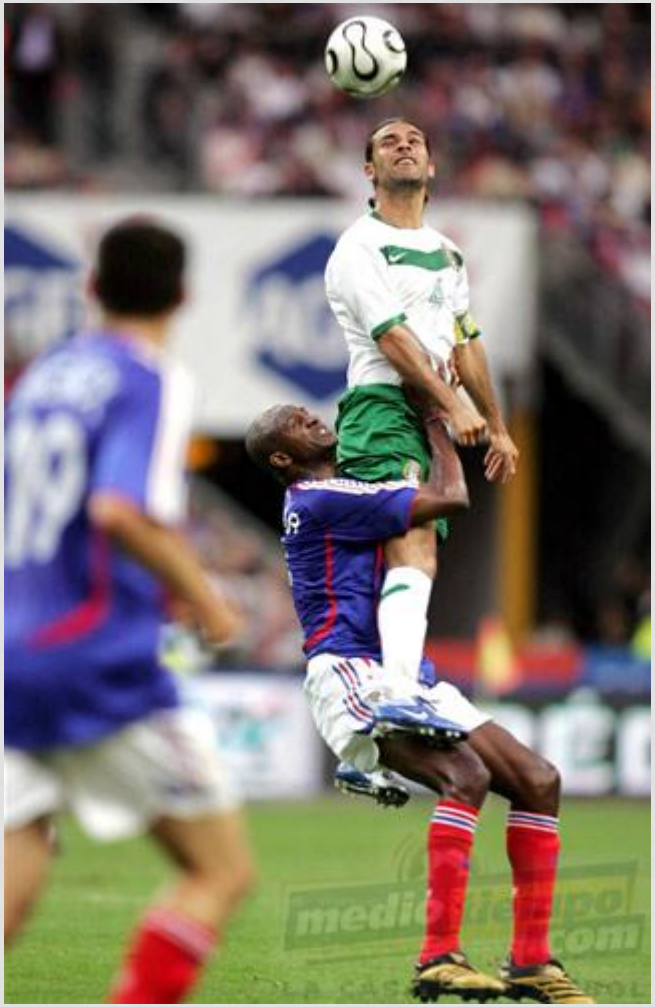






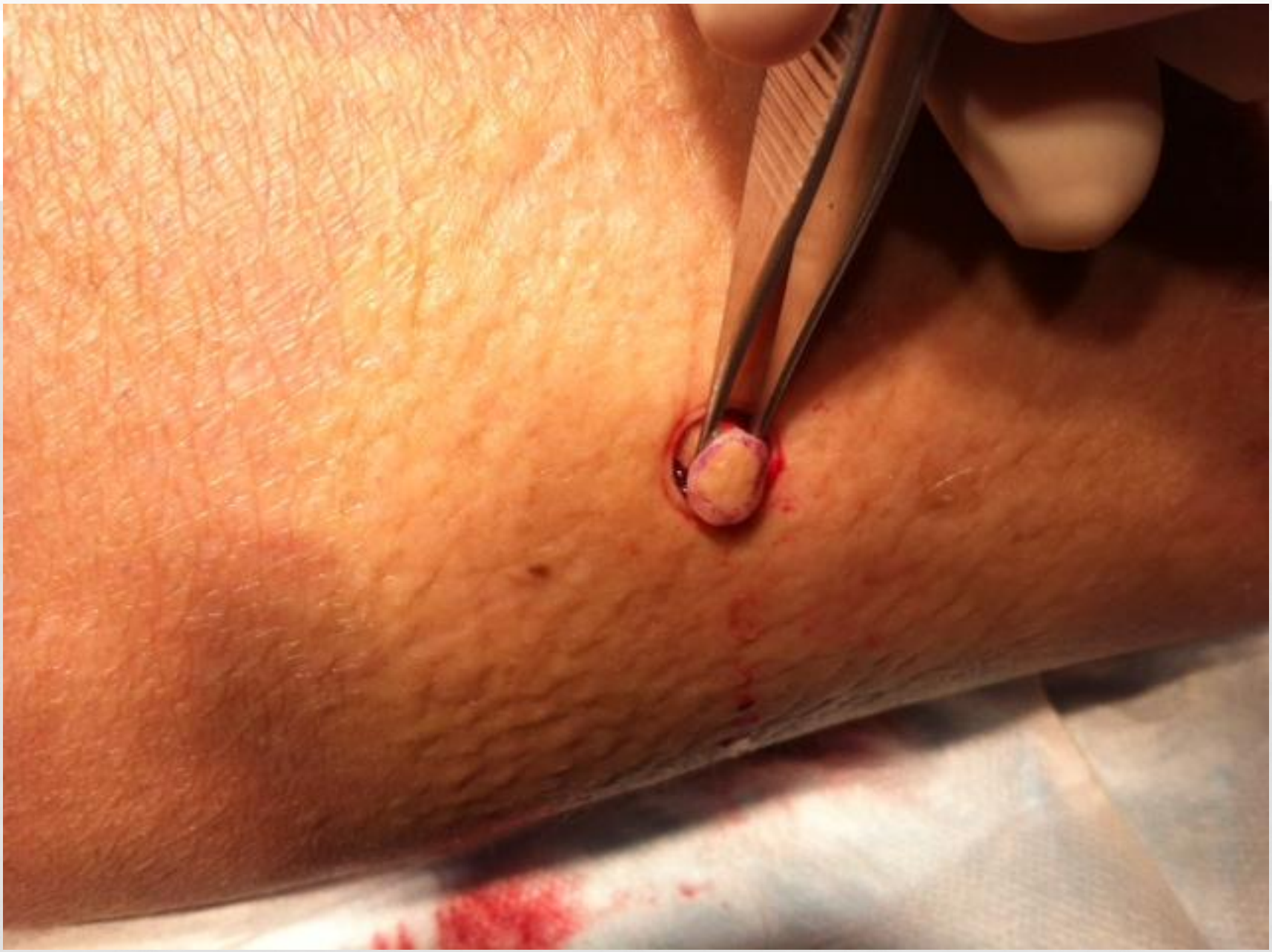
POINT 4

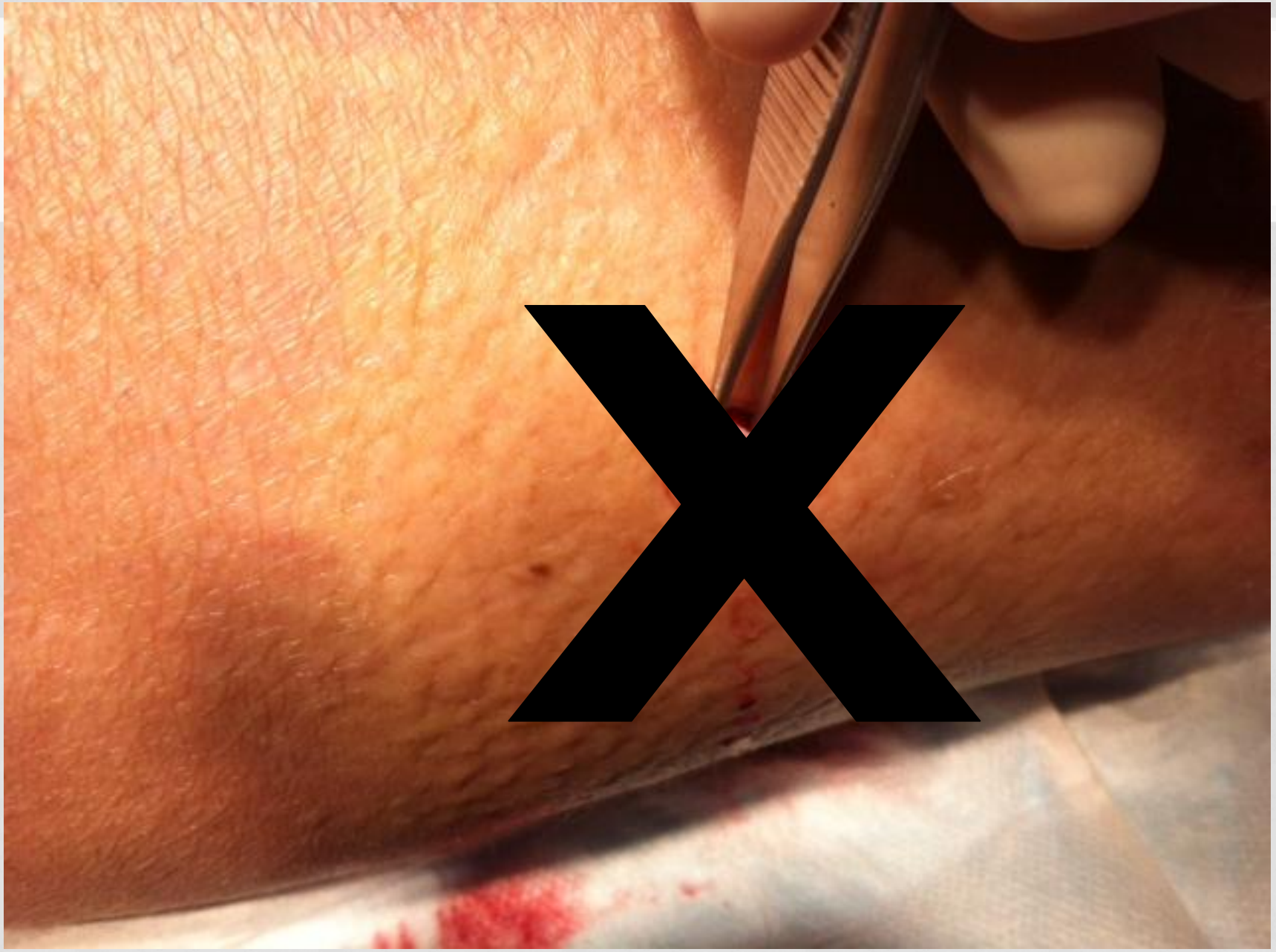
- Inspect the whole patient if atypical mole present

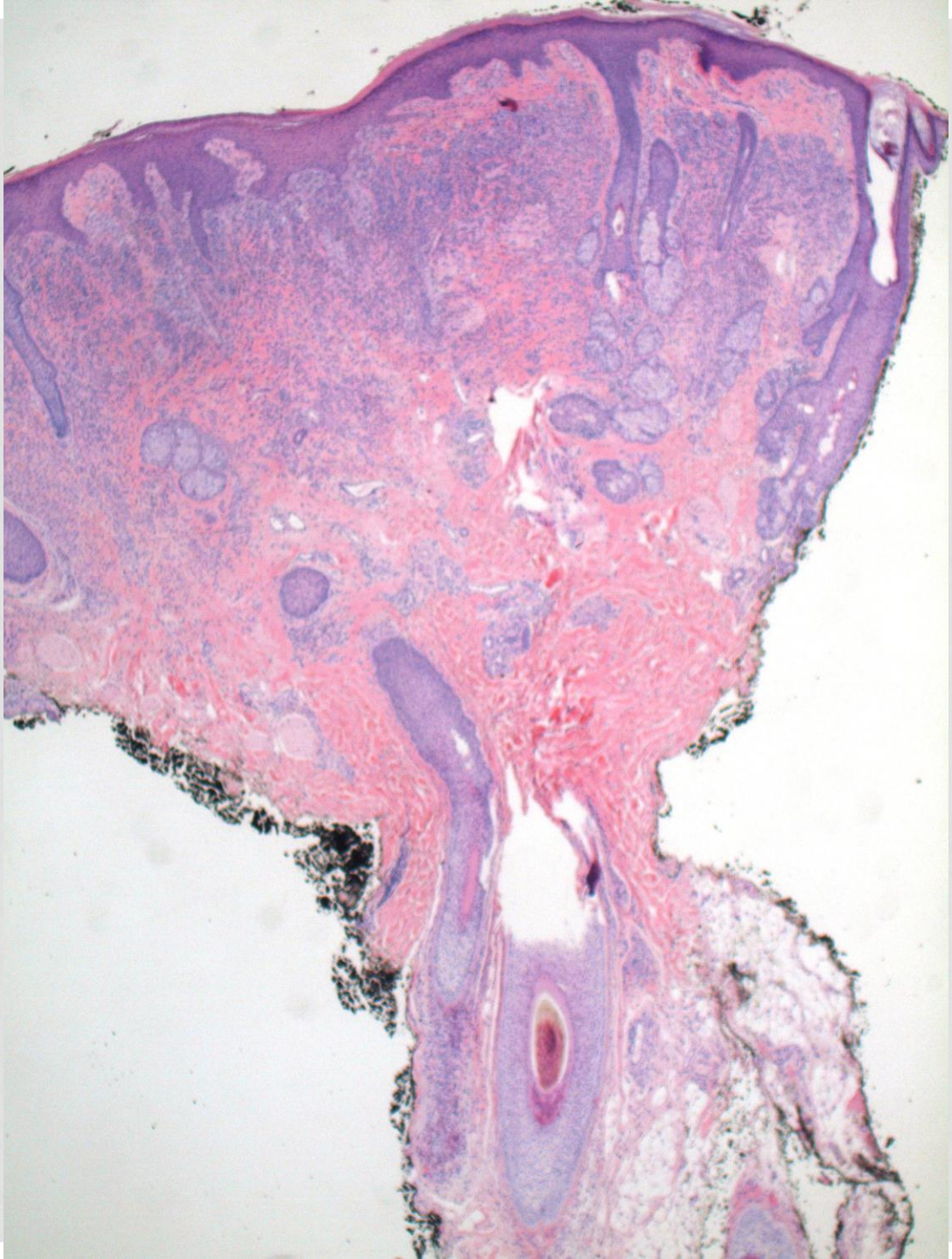


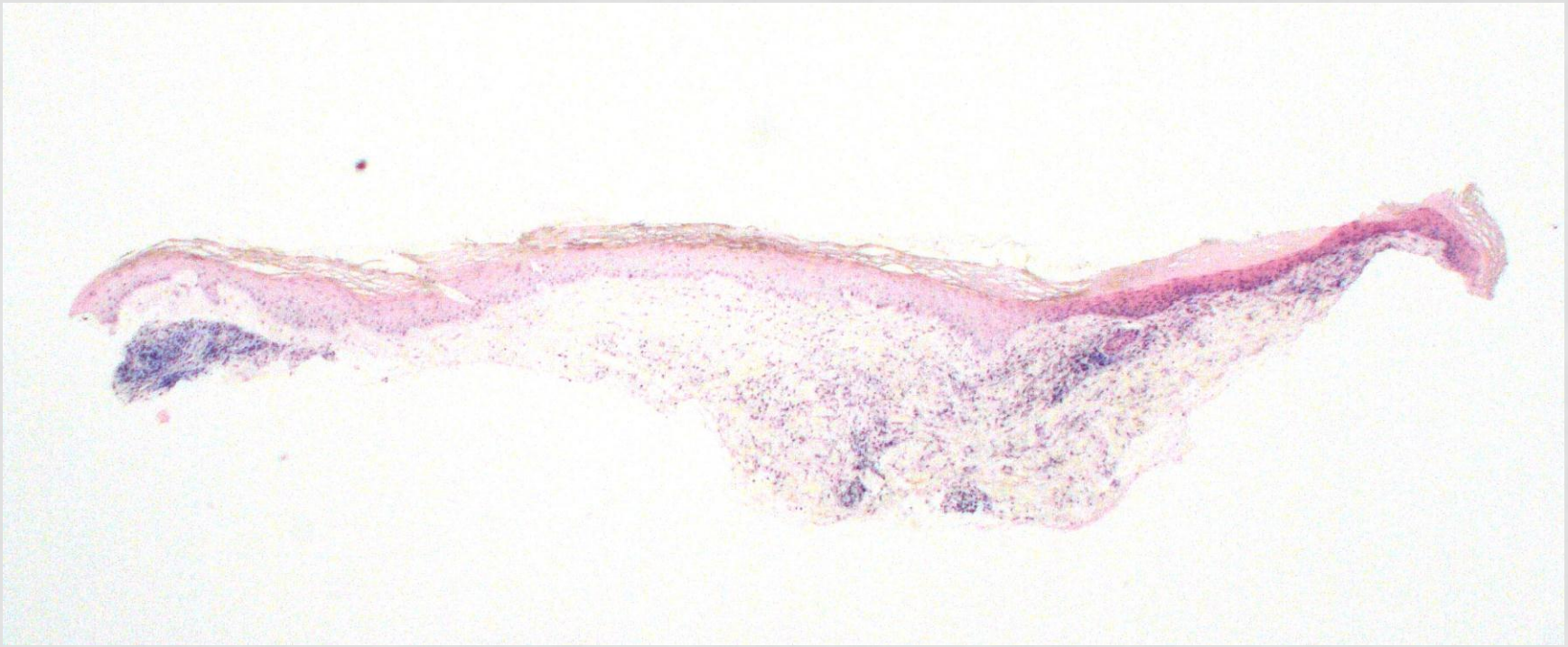
POINT 5

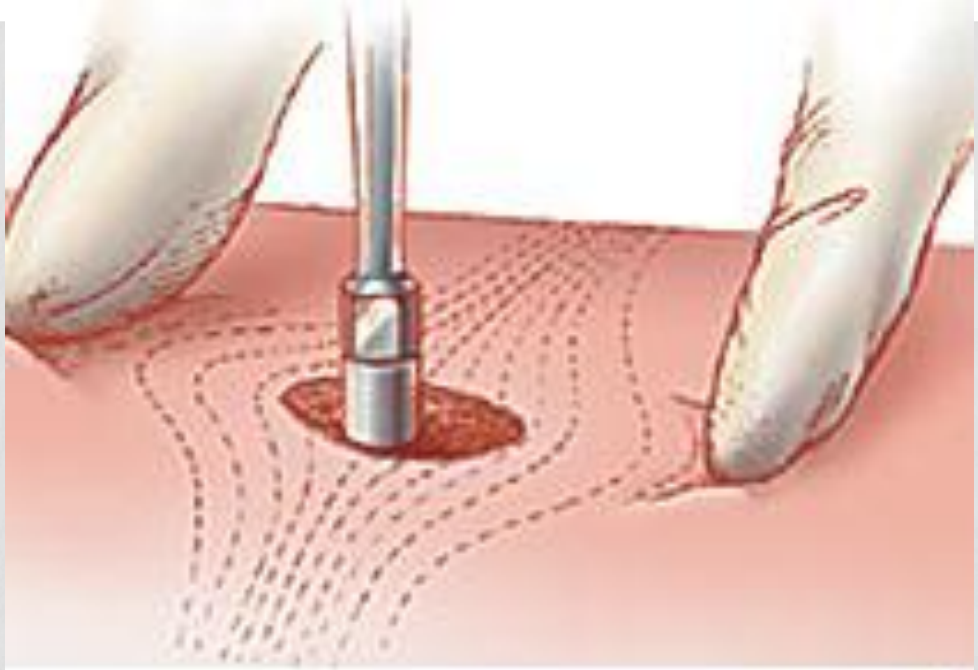
- Provide good material
- Do not use forceps when taking punch biopsy

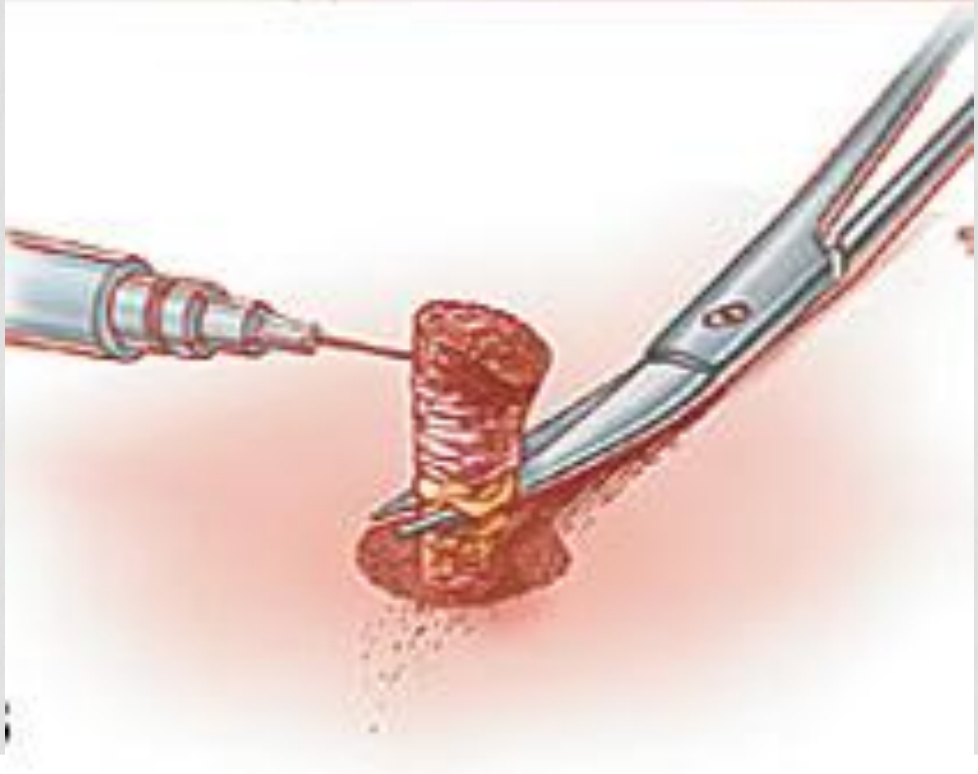


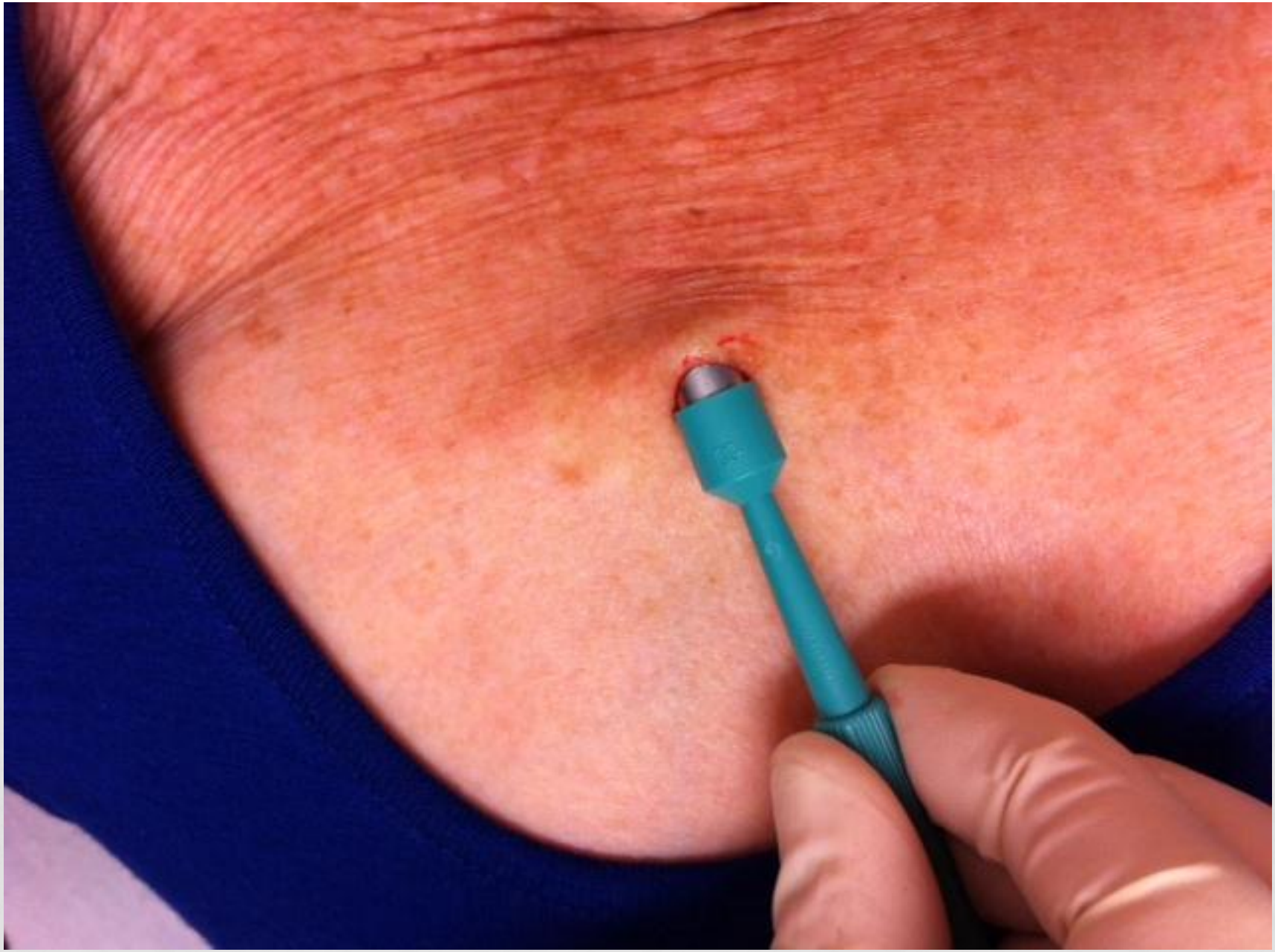


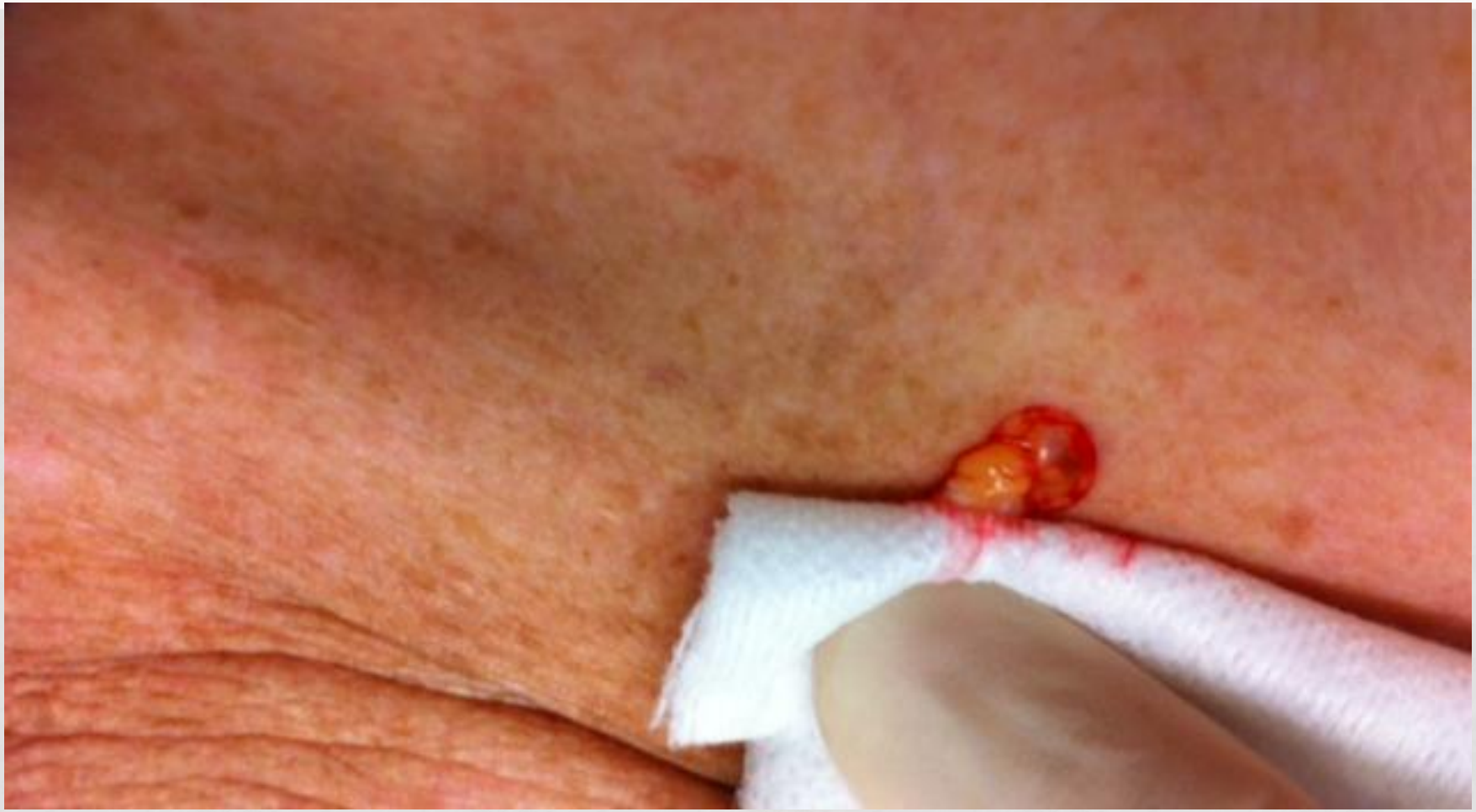












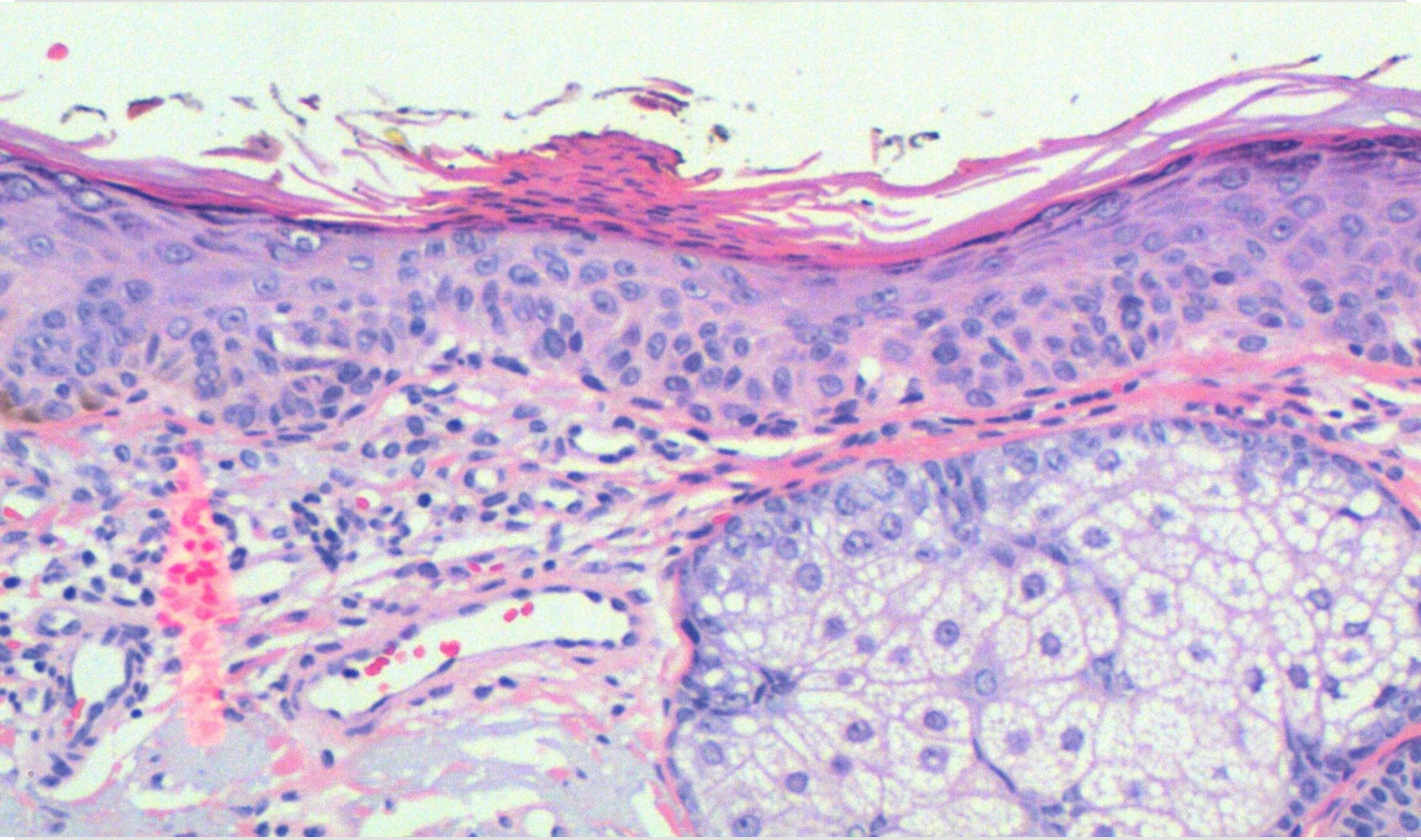
POINT 5

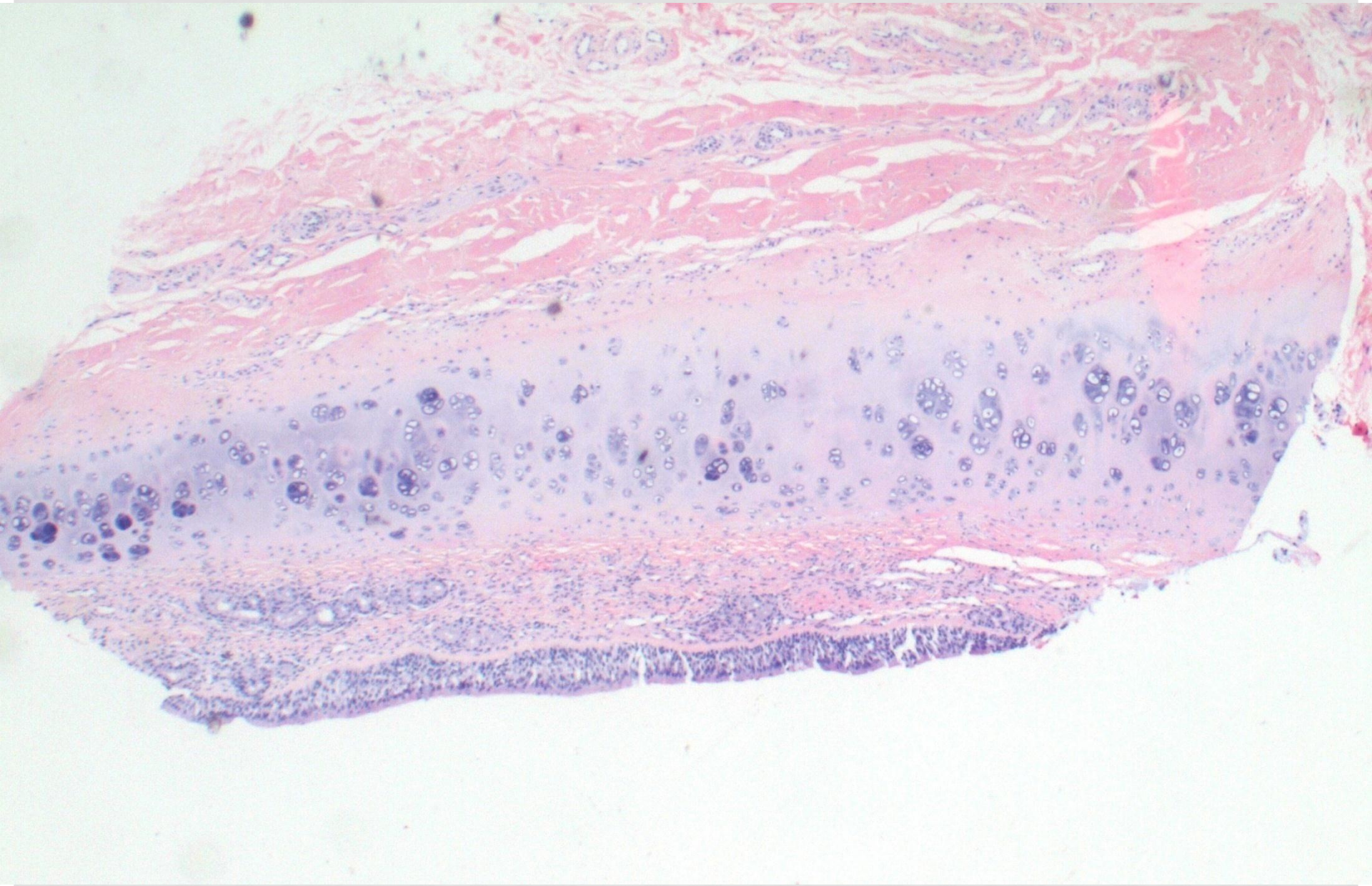
- Provide good material

POINT 6

- Provide good material
- More generally better……

- Punch biopsy of a nose
  - ? Solar Keratosis ? SCC



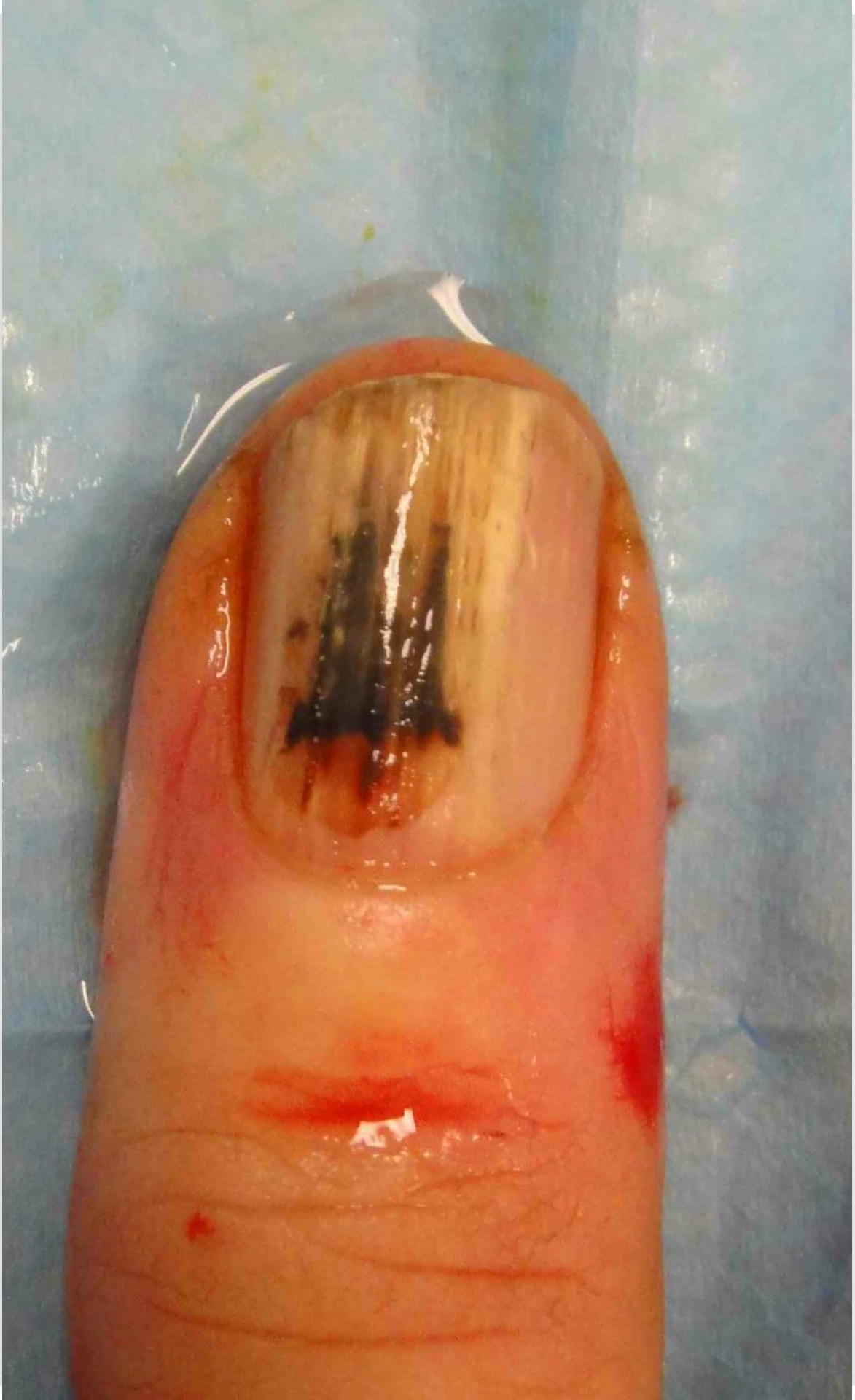


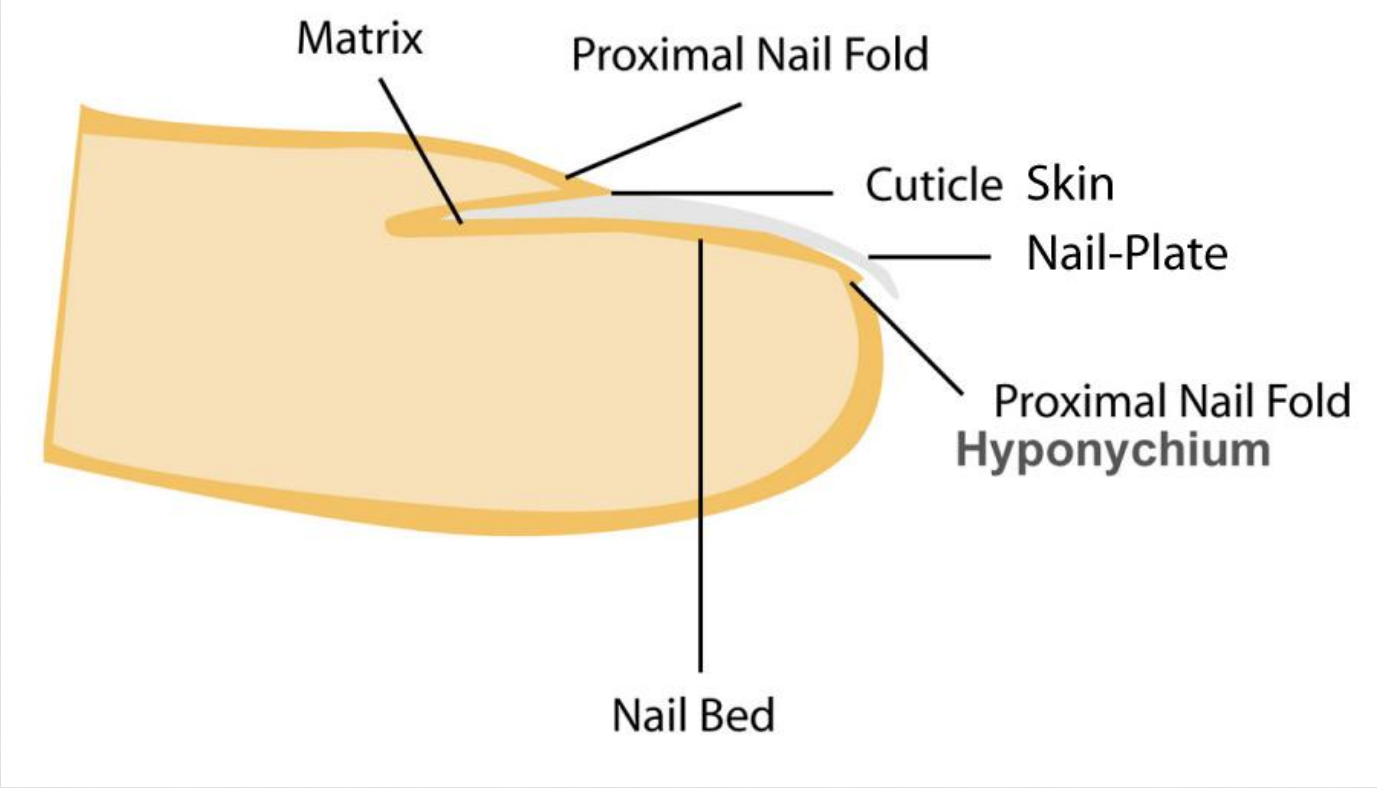
POINT 6

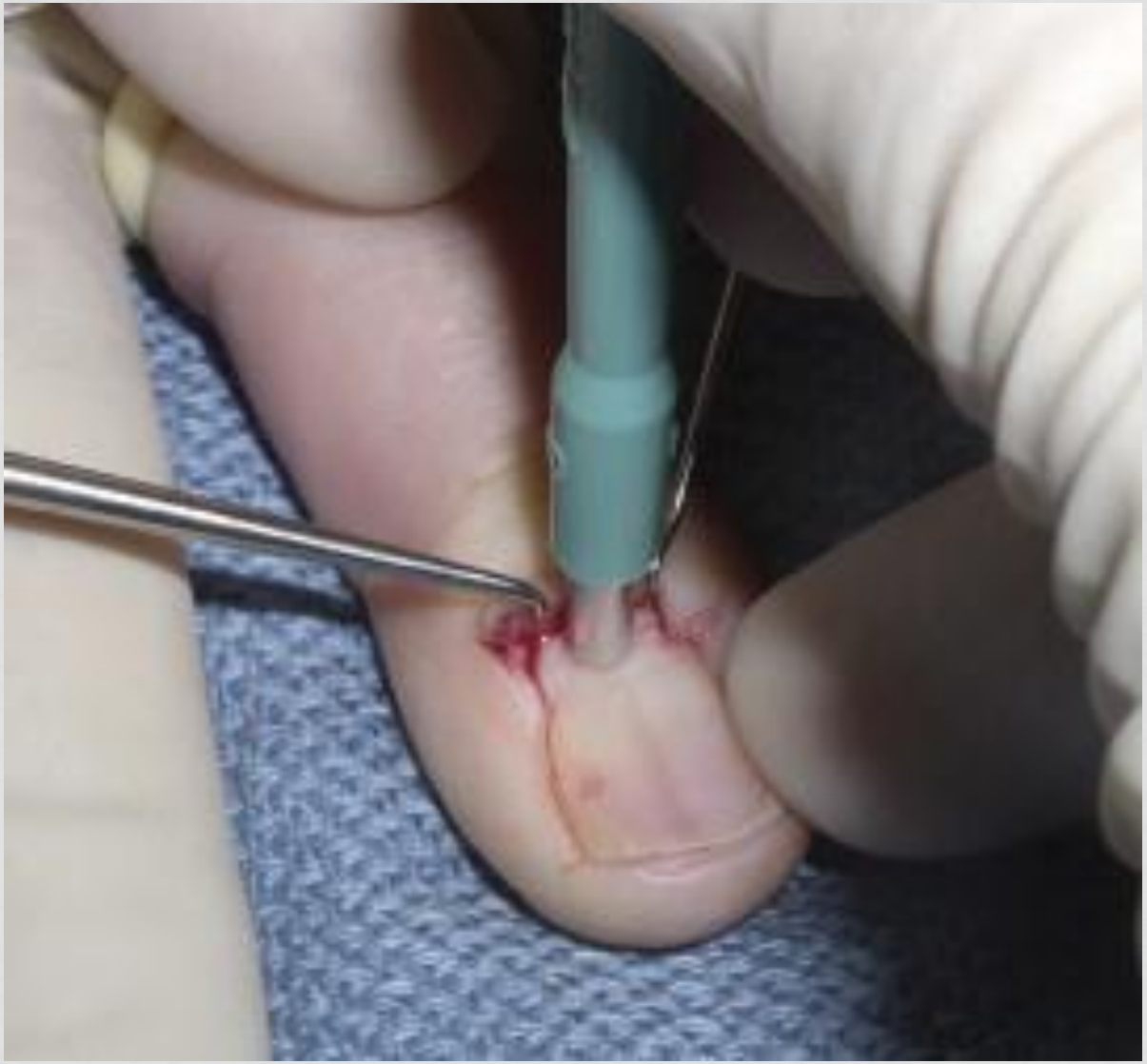
- Provide good material
- More generally better……

POINT 7

- Sample the nail matrix for nail pigmentation




Matrix
Proximal Nail Fold
Cuticle
Skin
Nail-Plate
Proximal Nail Fold
Hyponychium
Nail Bed



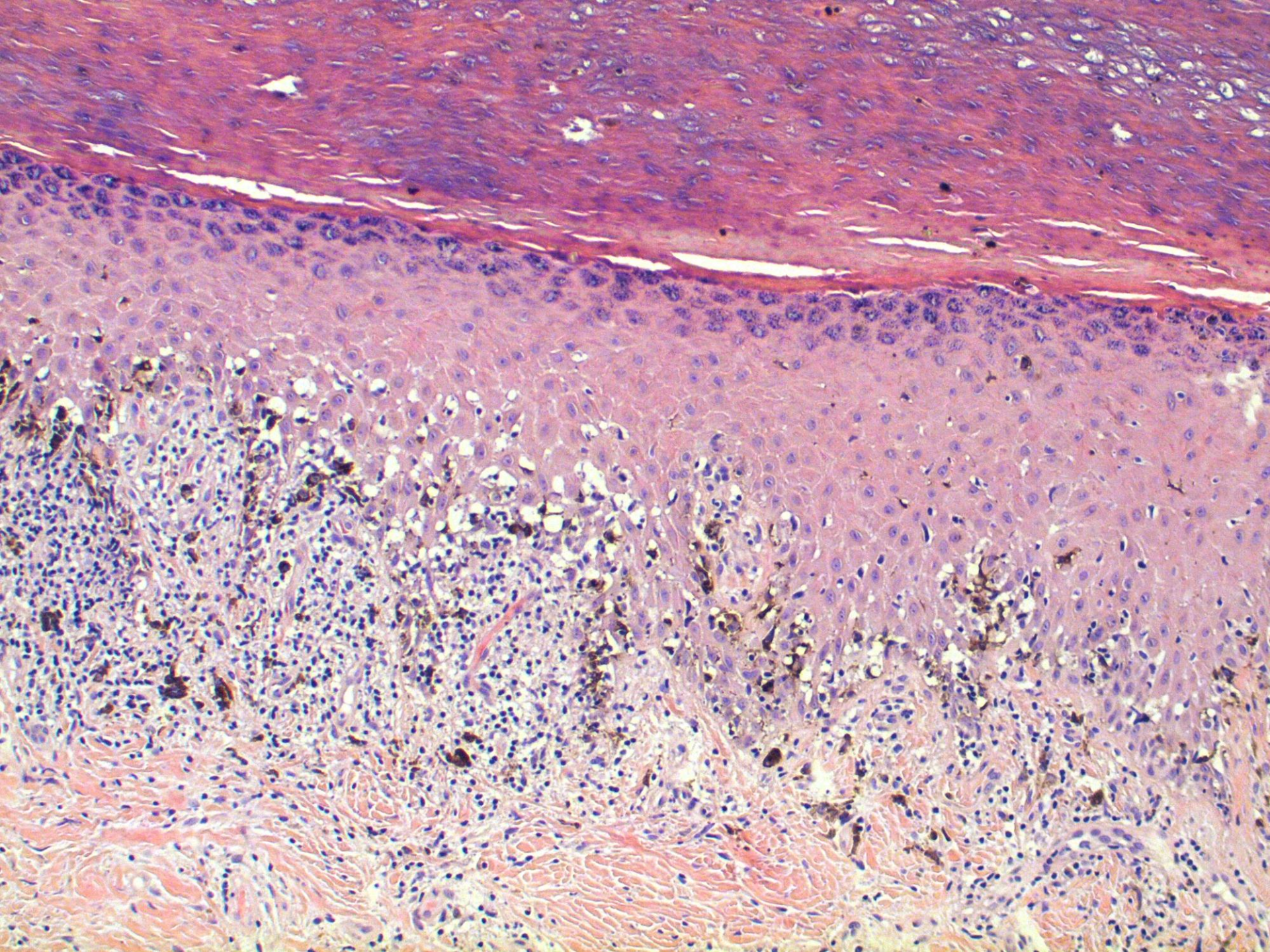
POINT 7

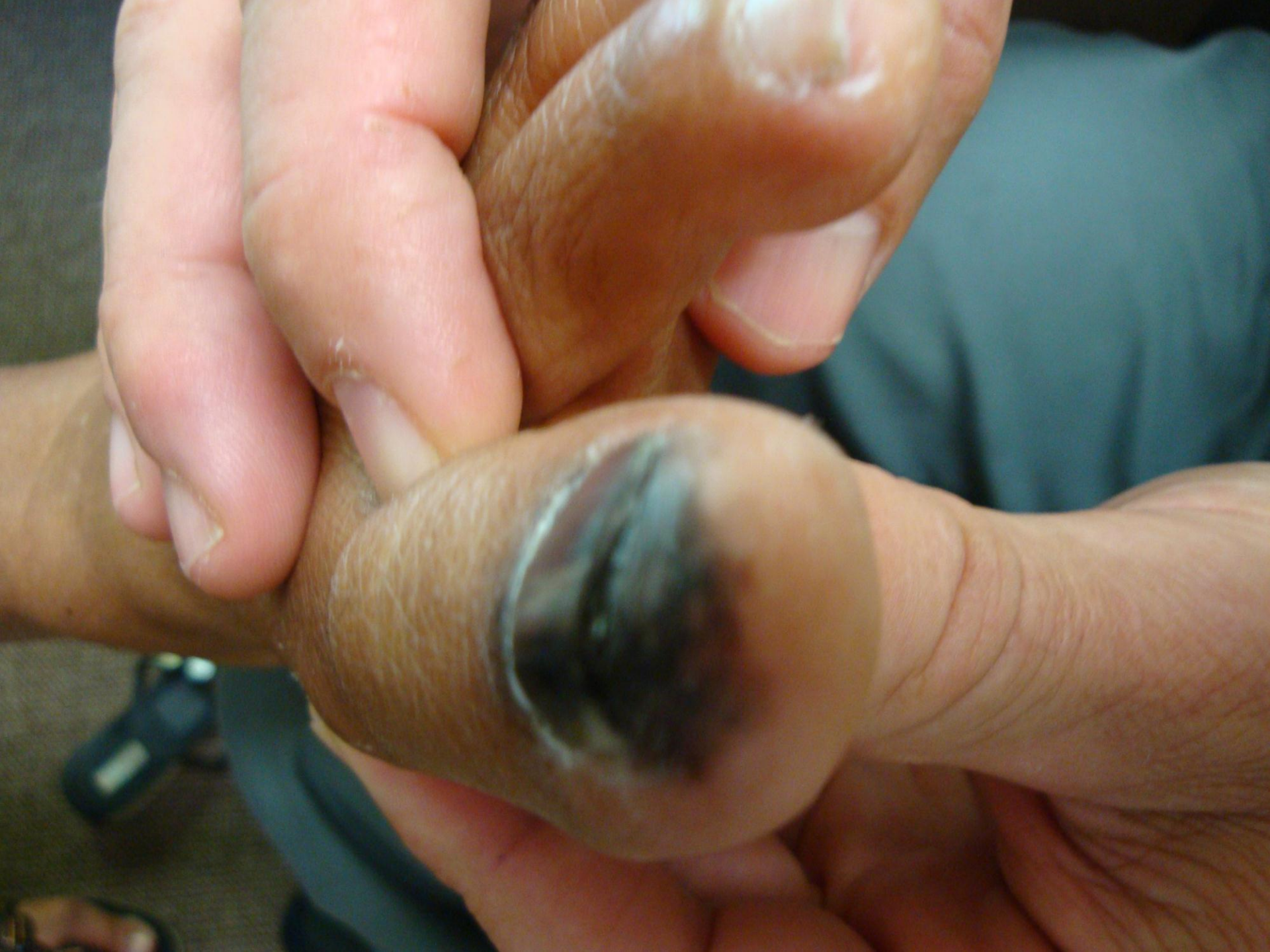
- Sample the nail matrix for nail pigmentation

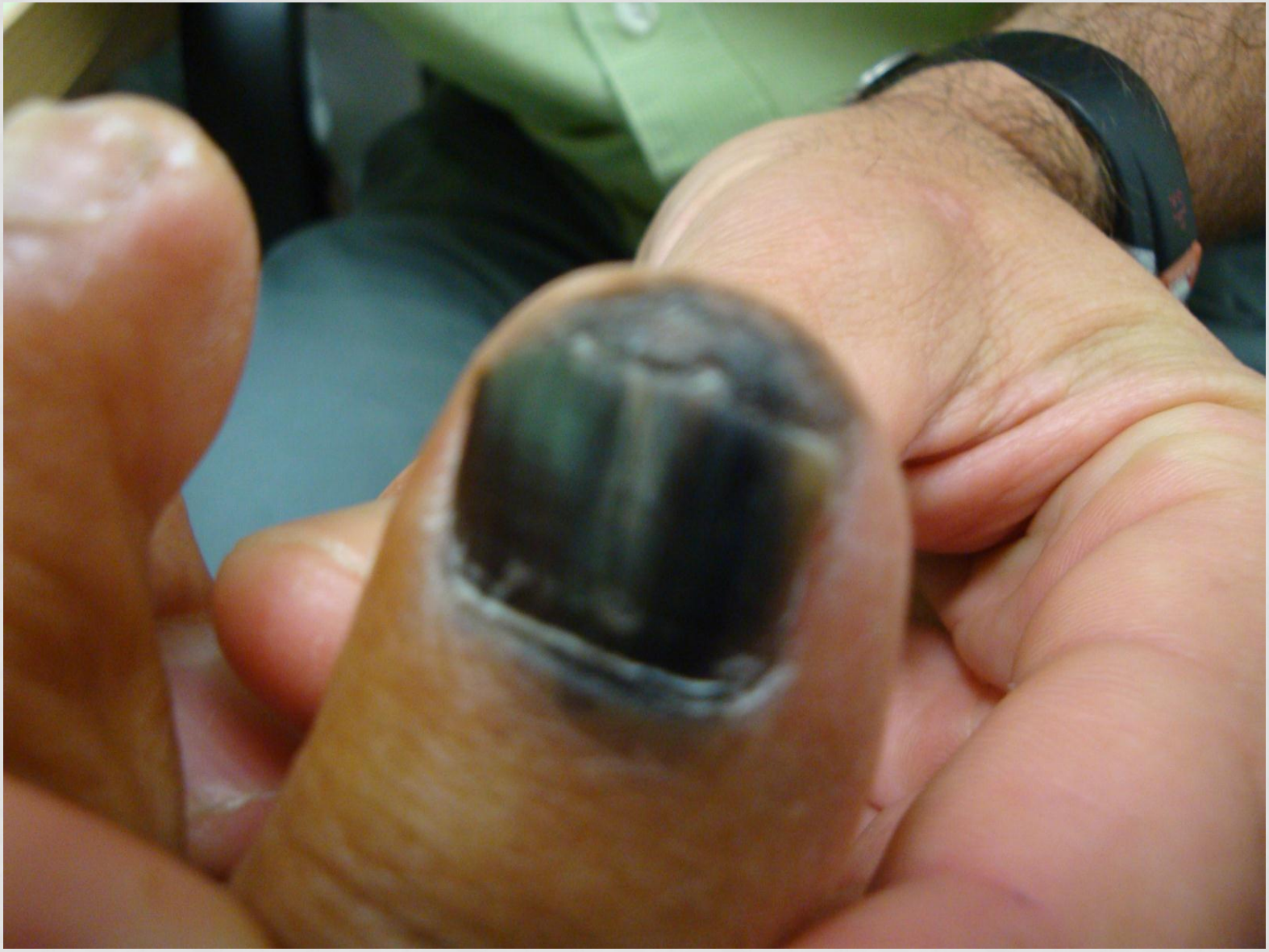
POINT 8

- Provide clinical information
  - Include pictures / dermoscopy

- 77 year old male
- Pigmented lesion
- Subungual Left Big Toe







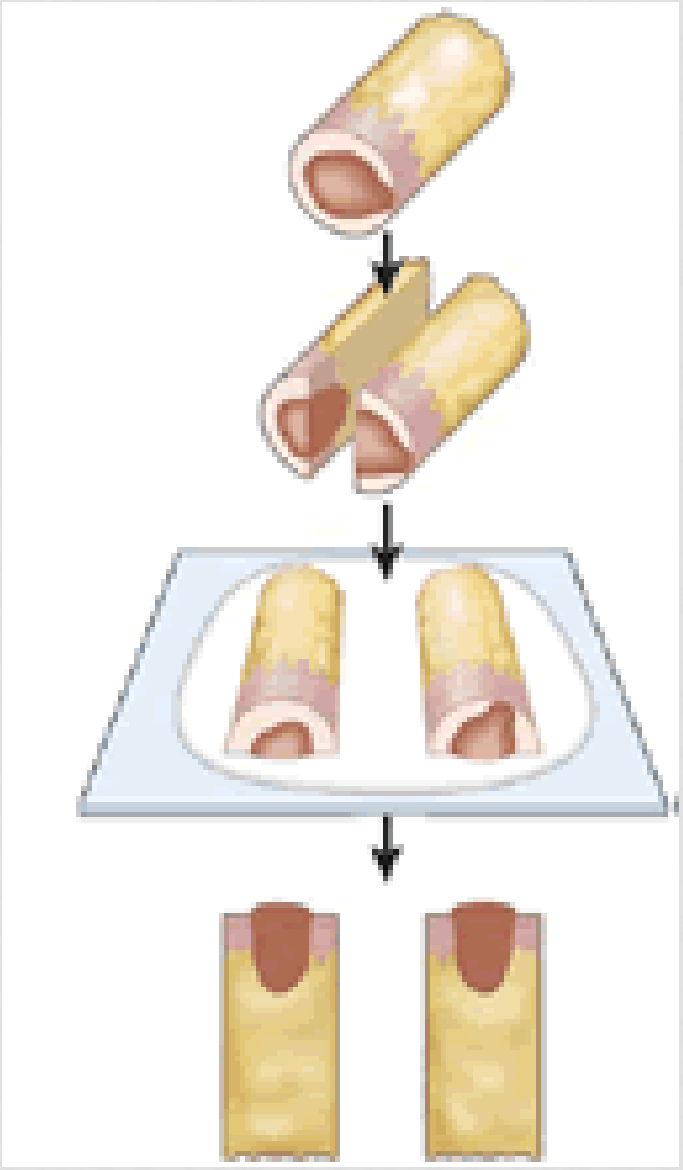
POINT 8

- Provide clinical information
  - Include pictures / dermoscopy

POINT 9

- Don’t trust punch excision margins

- Re-evaluation of punch biopsies with further levels
  - **30%** had positive margins

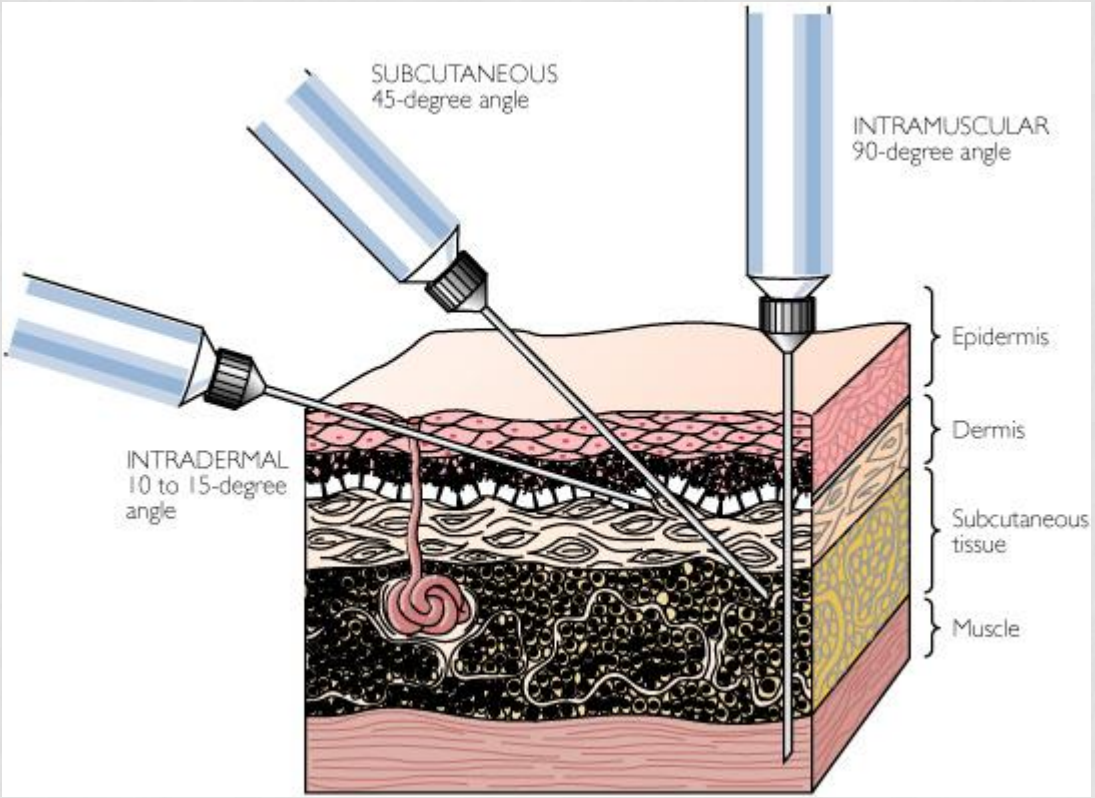


POINT 9

- Don't trust punch excision margins

POINT 10

- Infiltrate local anaesthetic deep first


SUBCUTANEOUS
45-degree angle
INTRAMUSCULAR
90-degree angle
INTRADERMAL
10 to 15-degree
angle
Epidermis
Dermis
Subcutaneous
tissue
Muscle

- Other helpful techniques
  - Vibrating device
  - Squeeze ball
  - Gate theory / tapping
  - LA Mix with buffering
  - Warm local
  - Regional nerve block

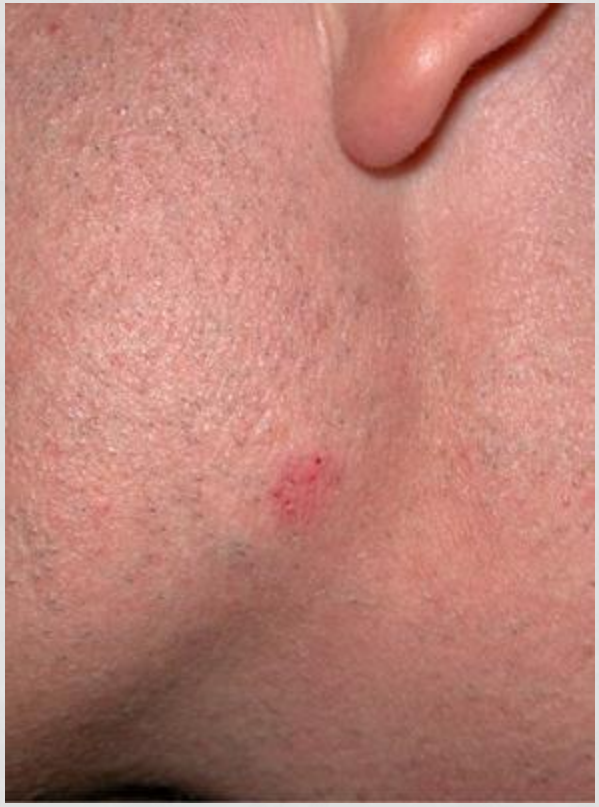
POINT 10

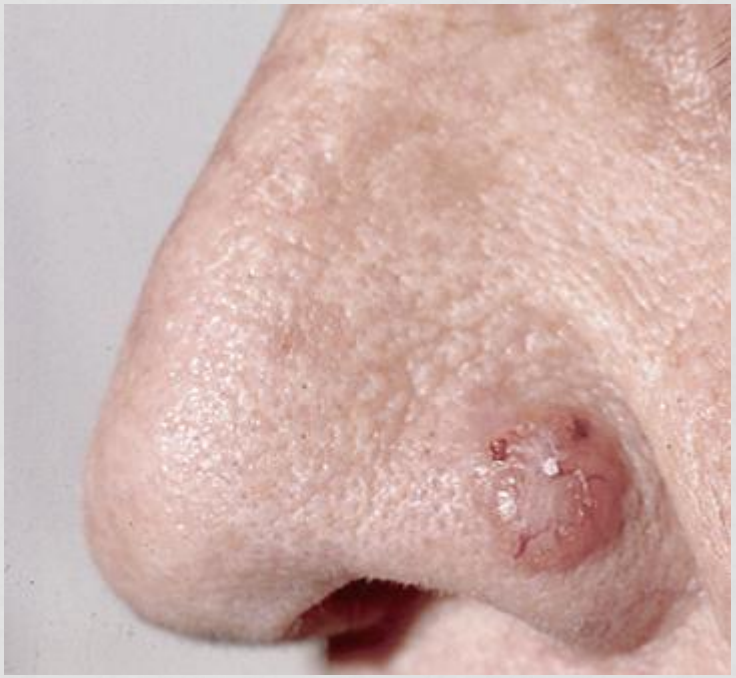
- Infiltrate local anaesthetic deep first

POINT 11

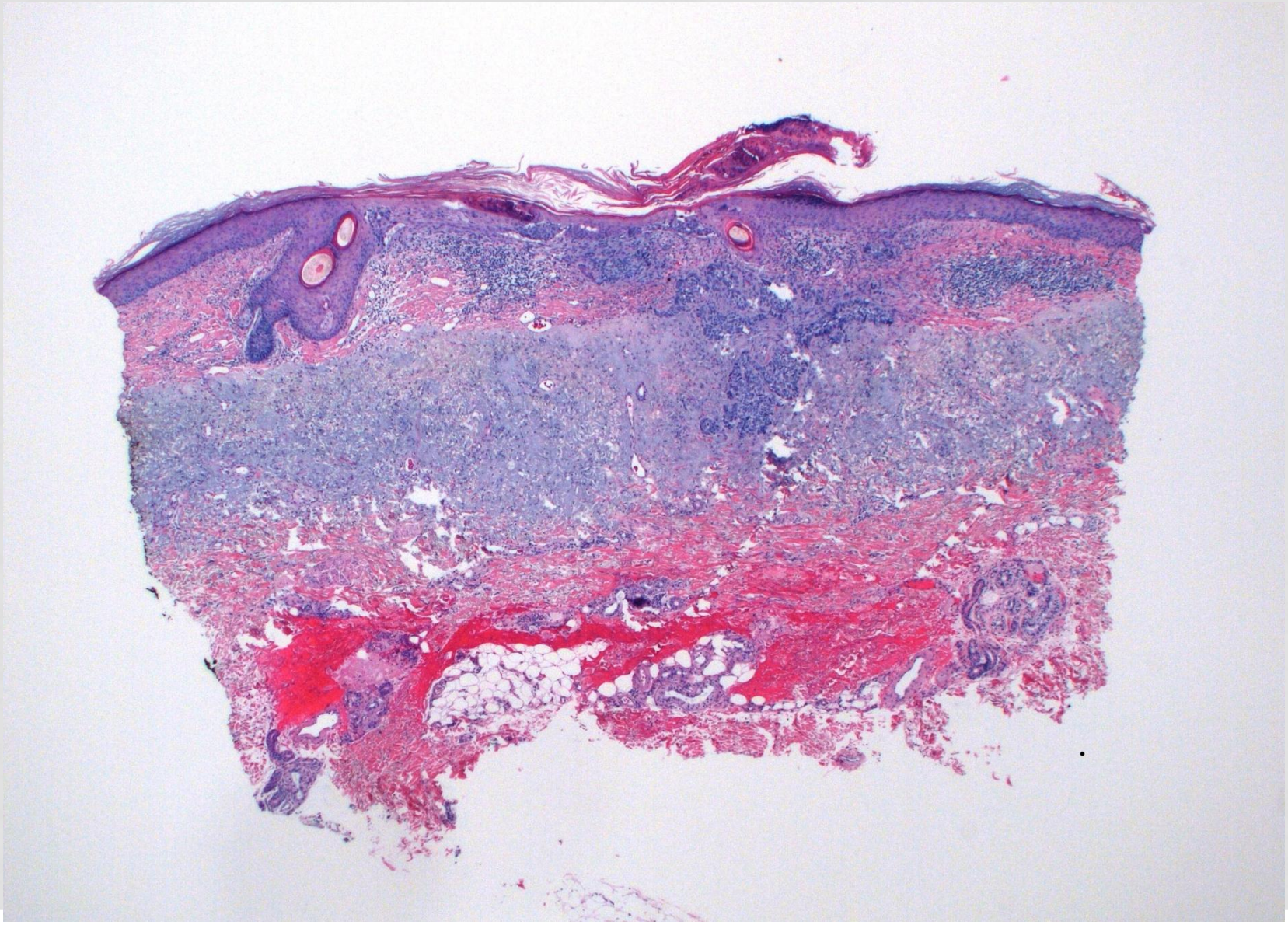
- Always correlate pathology report to clinical impression

SUPERFICIAL VS NODULAR BASAL CELL CARCINOMA





SUPERFICIAL VS NODULAR BCC



TIPS

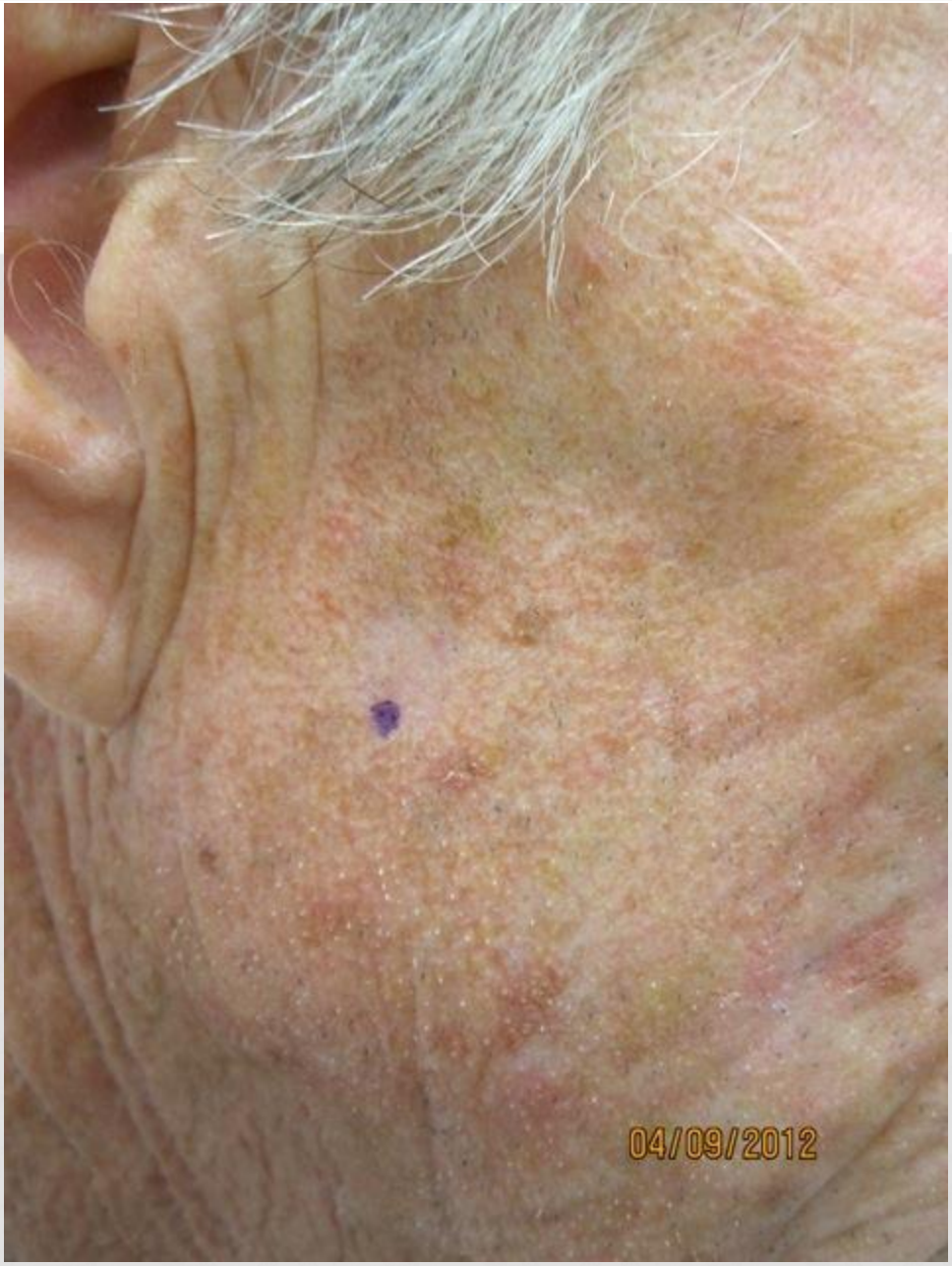
- Sometimes overlap between superficial and nodular BCC
  - Clinical correlation
  - Tell pathologist what you are thinking

POINT 11

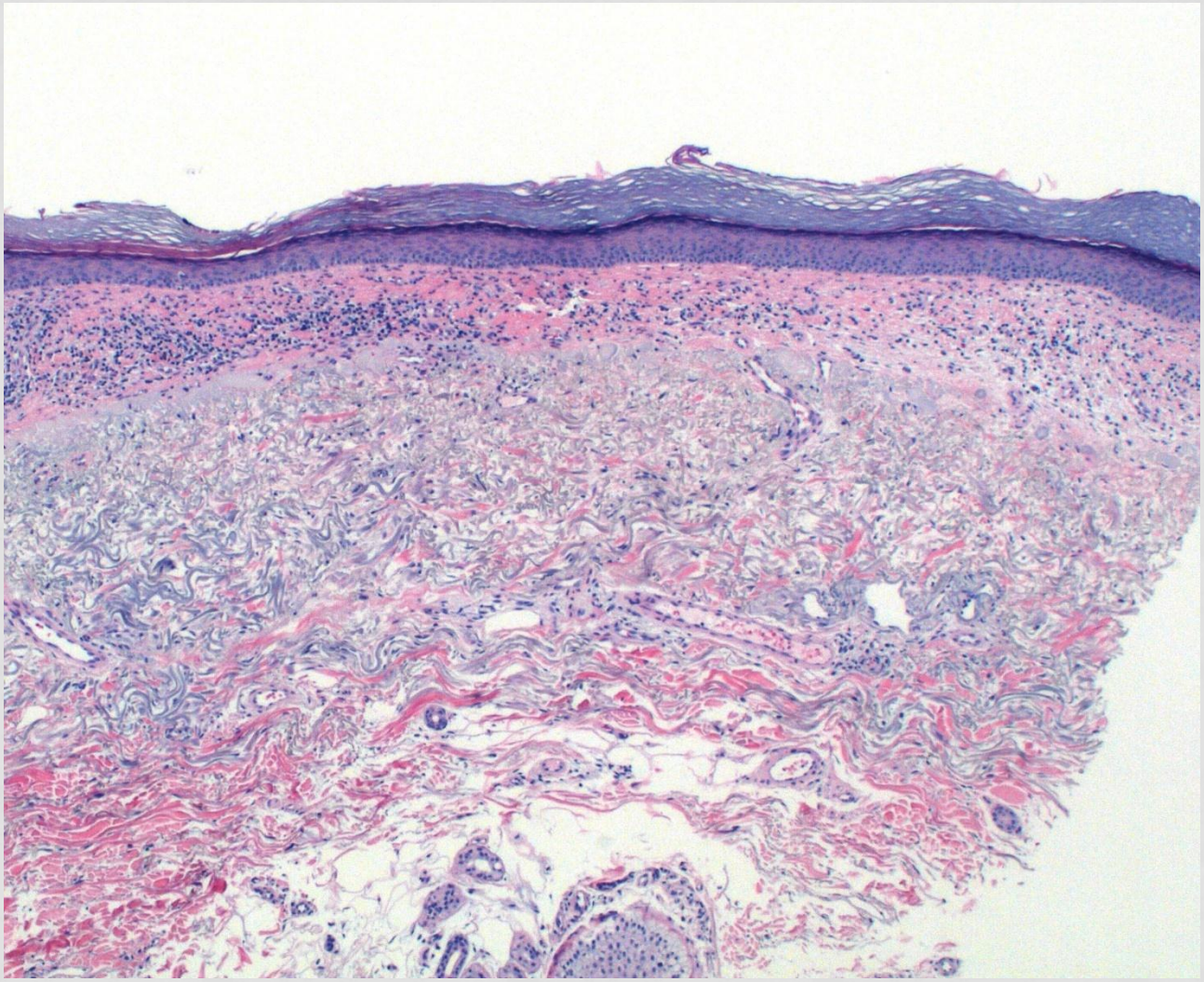
- Always correlate pathology report to clinical impression

POINT 12

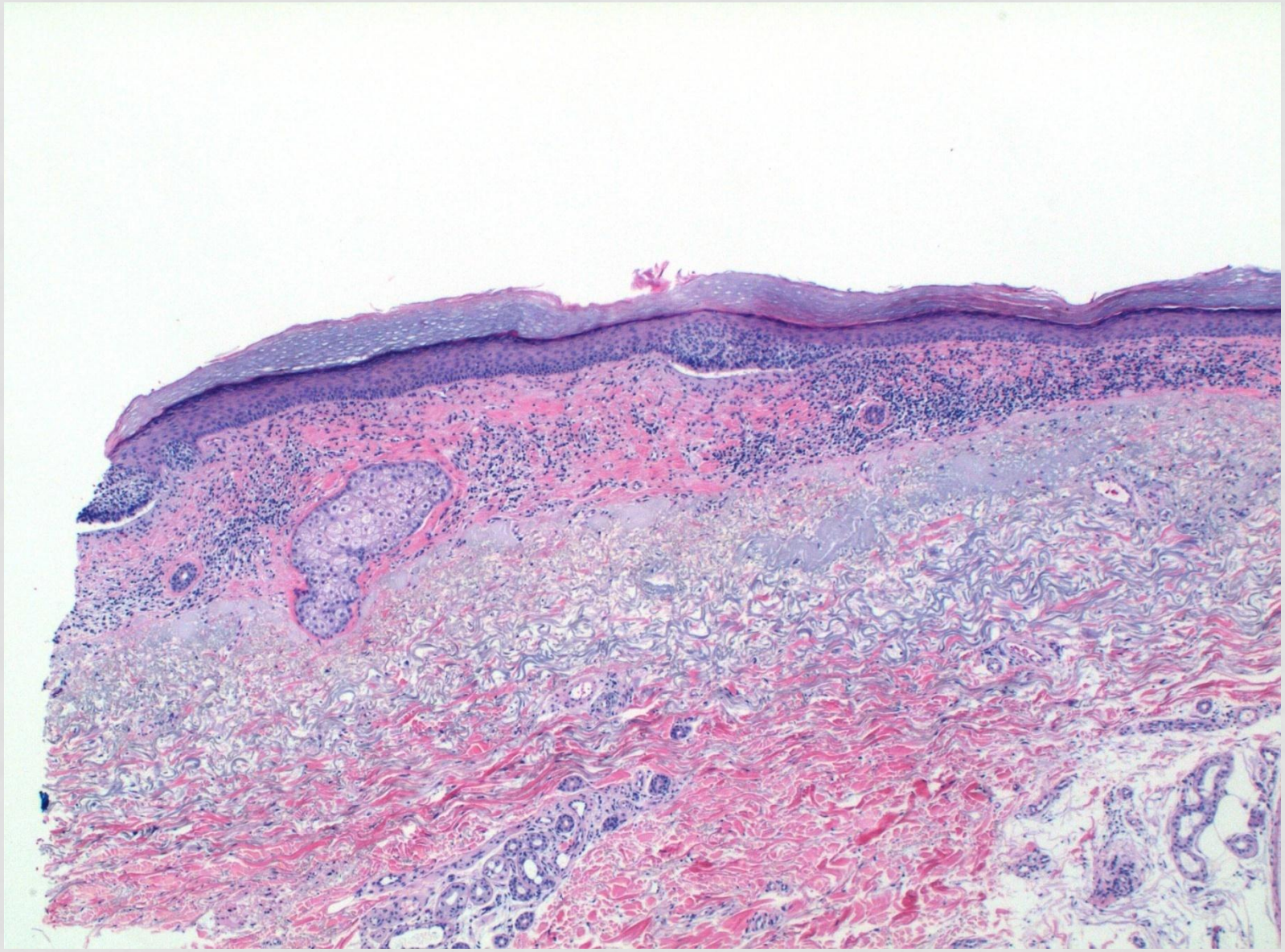
- Question your pathologist if report doesn't add up


04/09/2012

? BCC



LEVELS PERFORMED



POINT 12

- Question your pathologist if report doesn't add up

POINT 13

- Report assessment – know your pathologist

DYSPLASTIC NAEVUS

- Regular dysplastic naevus
  - Observe
- Severe atypia = unsure/borderline
  - Treat as worst case scenario

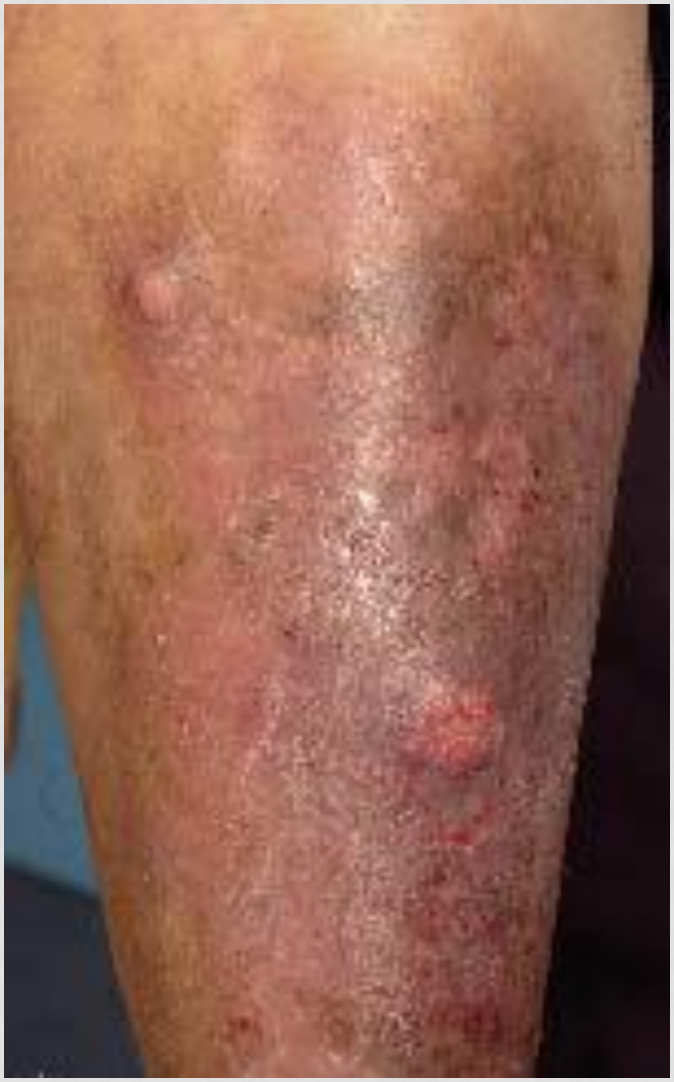
- Know your pathologist
  - When to re-excise

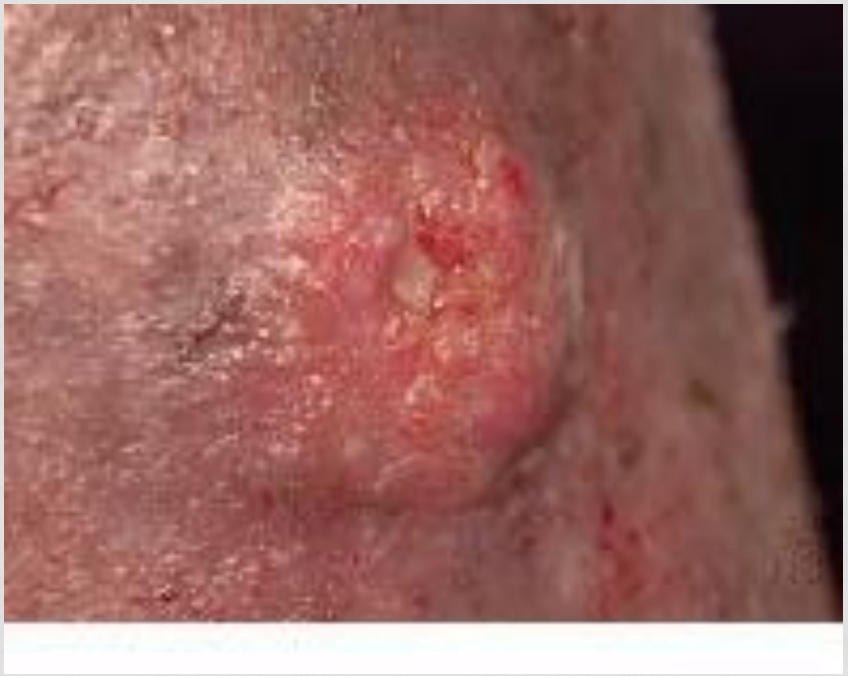
POINT 13

- Report assessment – know your pathologist

POINT 14

- Use sponge roll to fill necrotic punch holes



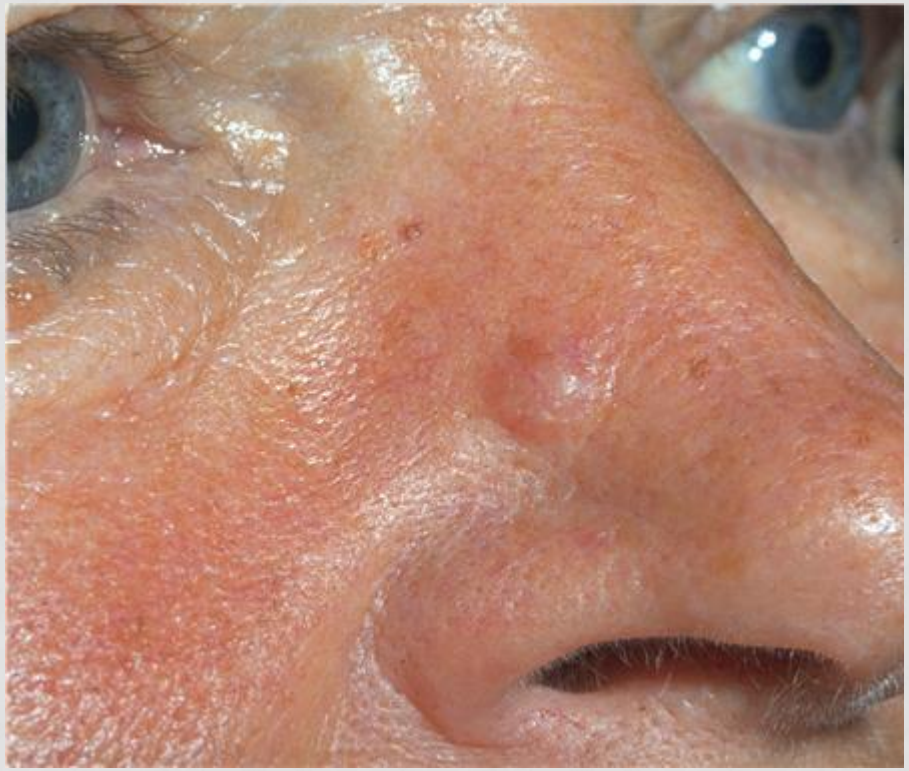


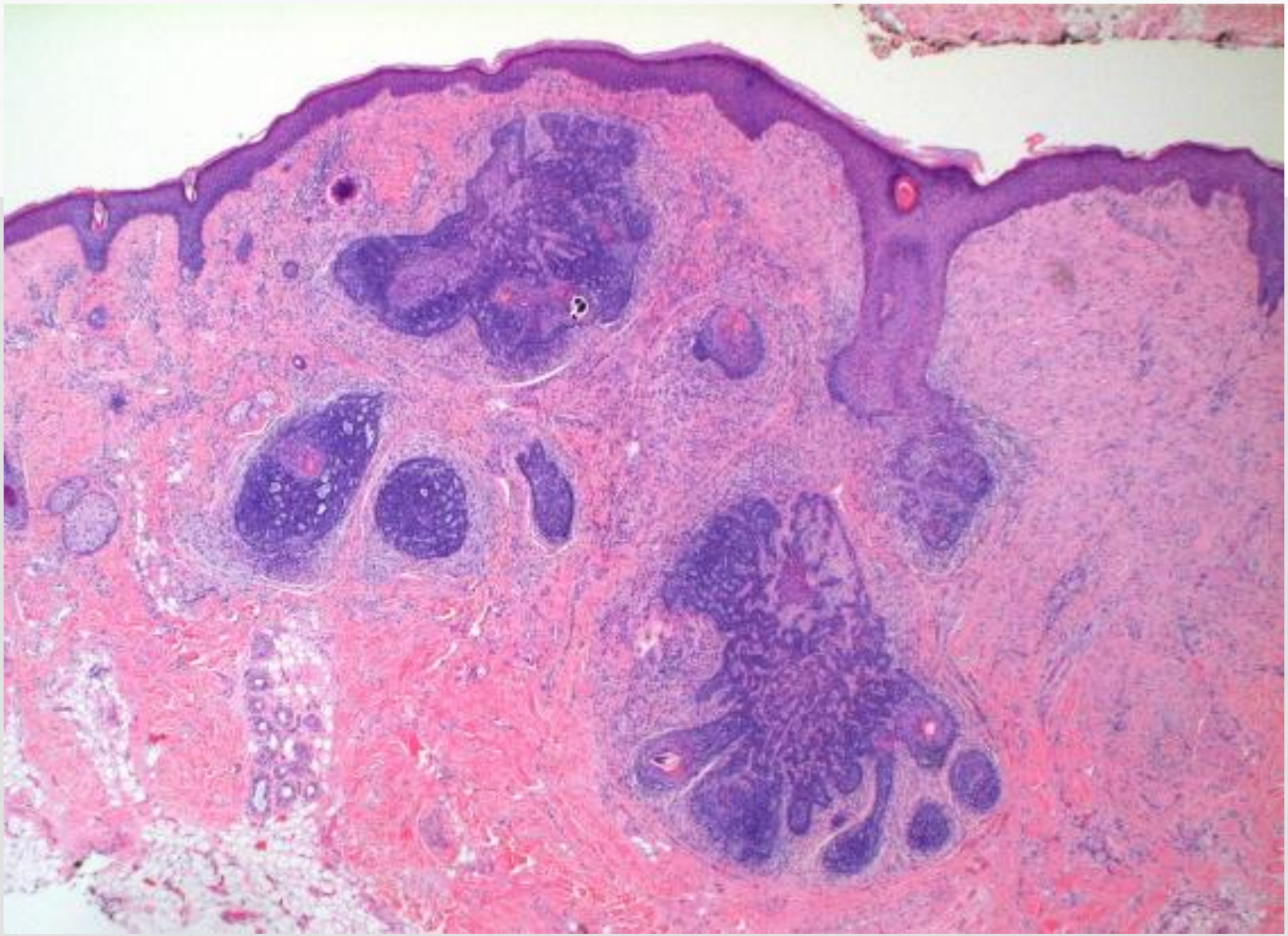
POINT 14

- Use sponge roll to fill necrotic punch holes

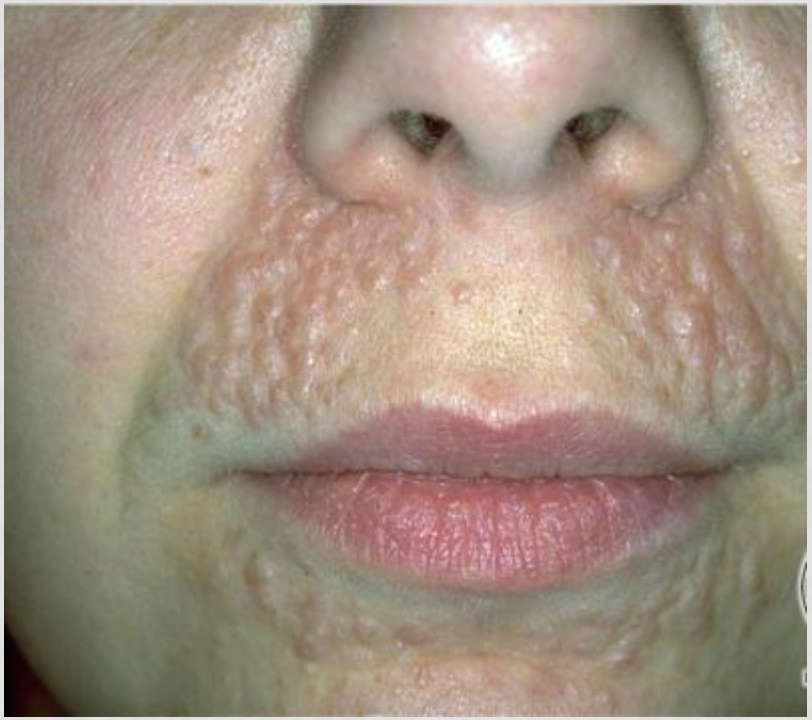
POINT 15

- Pay attention to demographics





- 14 year old

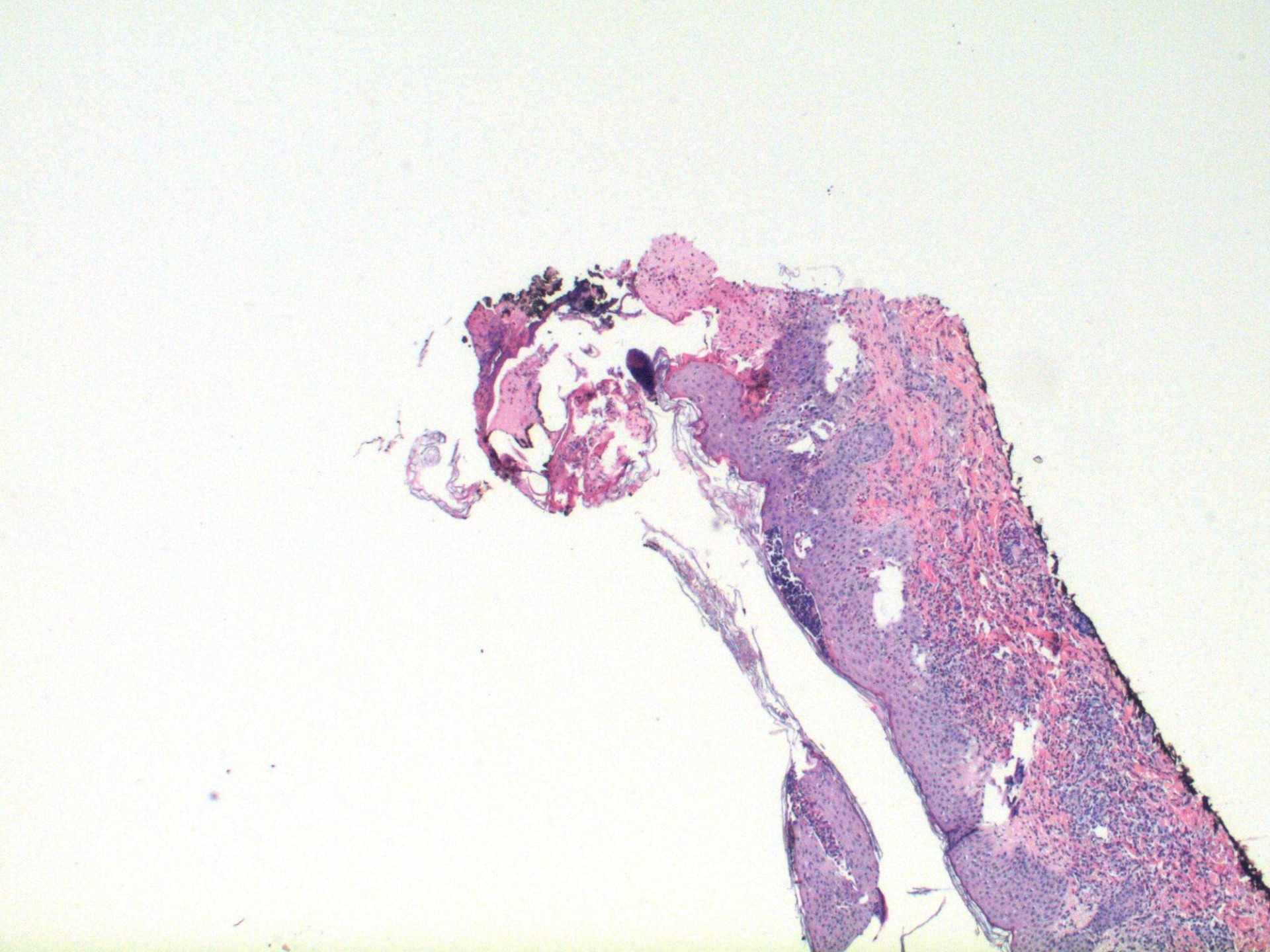


POINT 15

- Pay attention to demographics

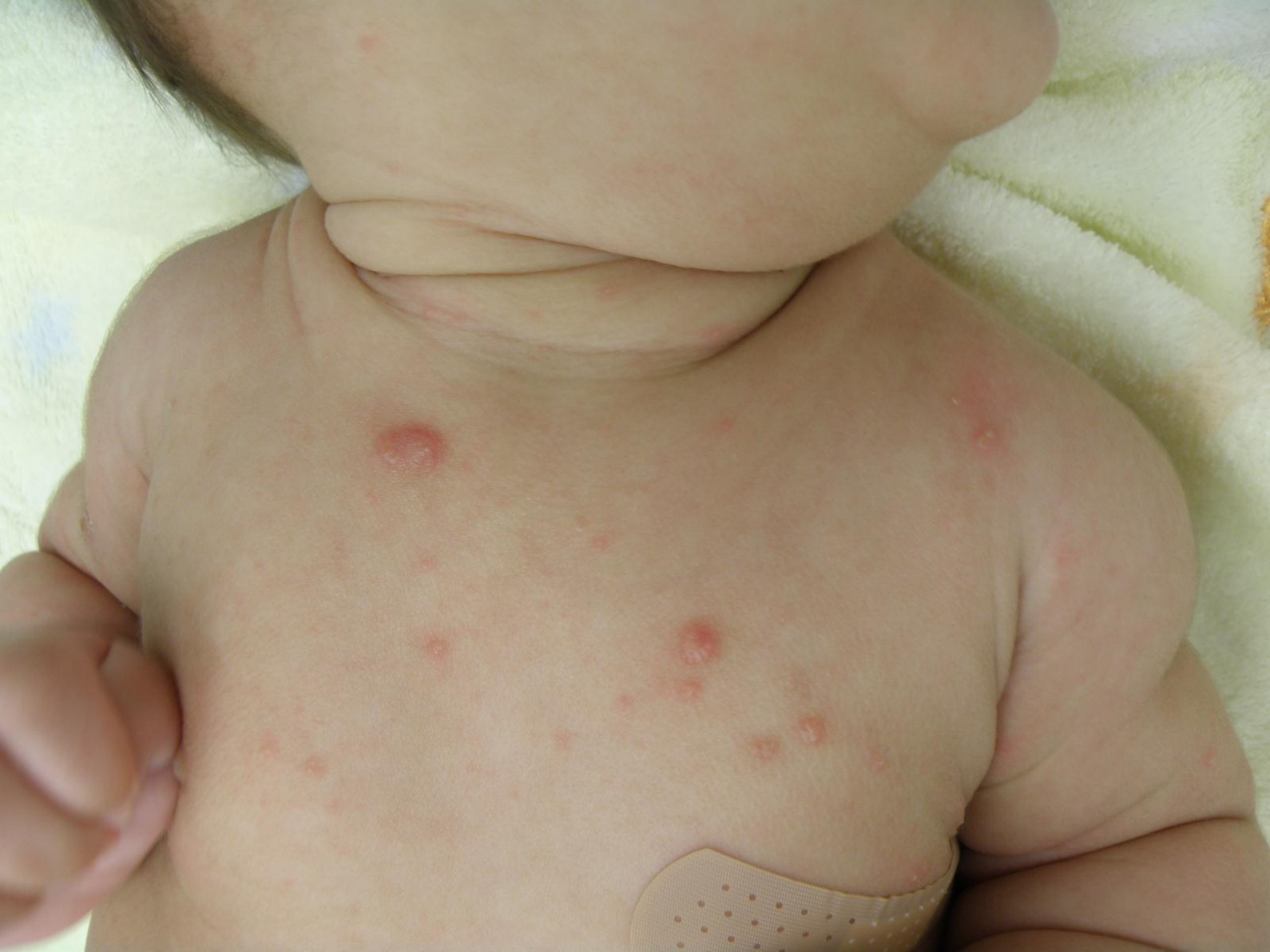
POINT 16

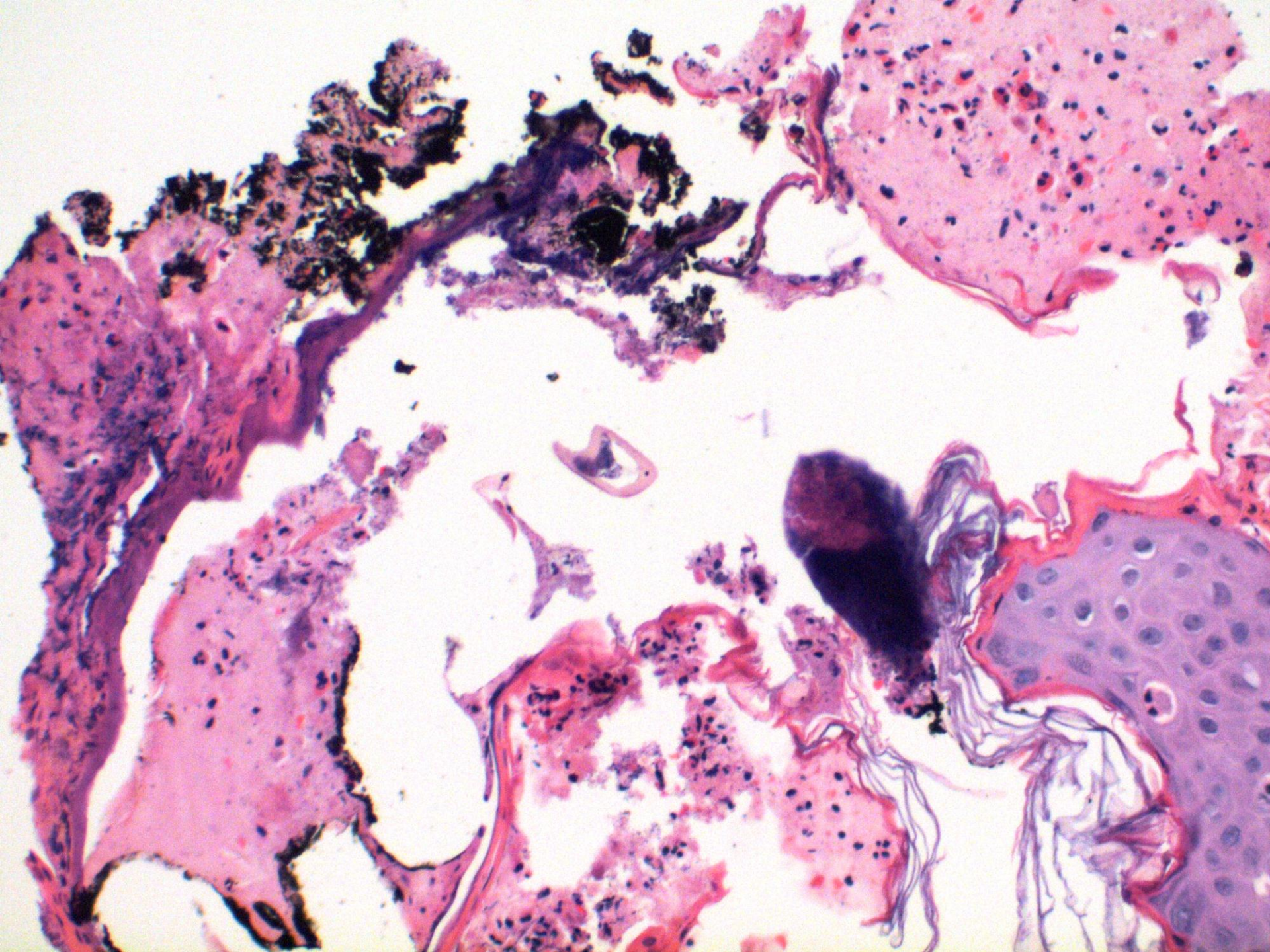
- Provide clinical information



CLINICAL INFO

- 6 week old
- Scattered truncal blisters
  - ? Scabies



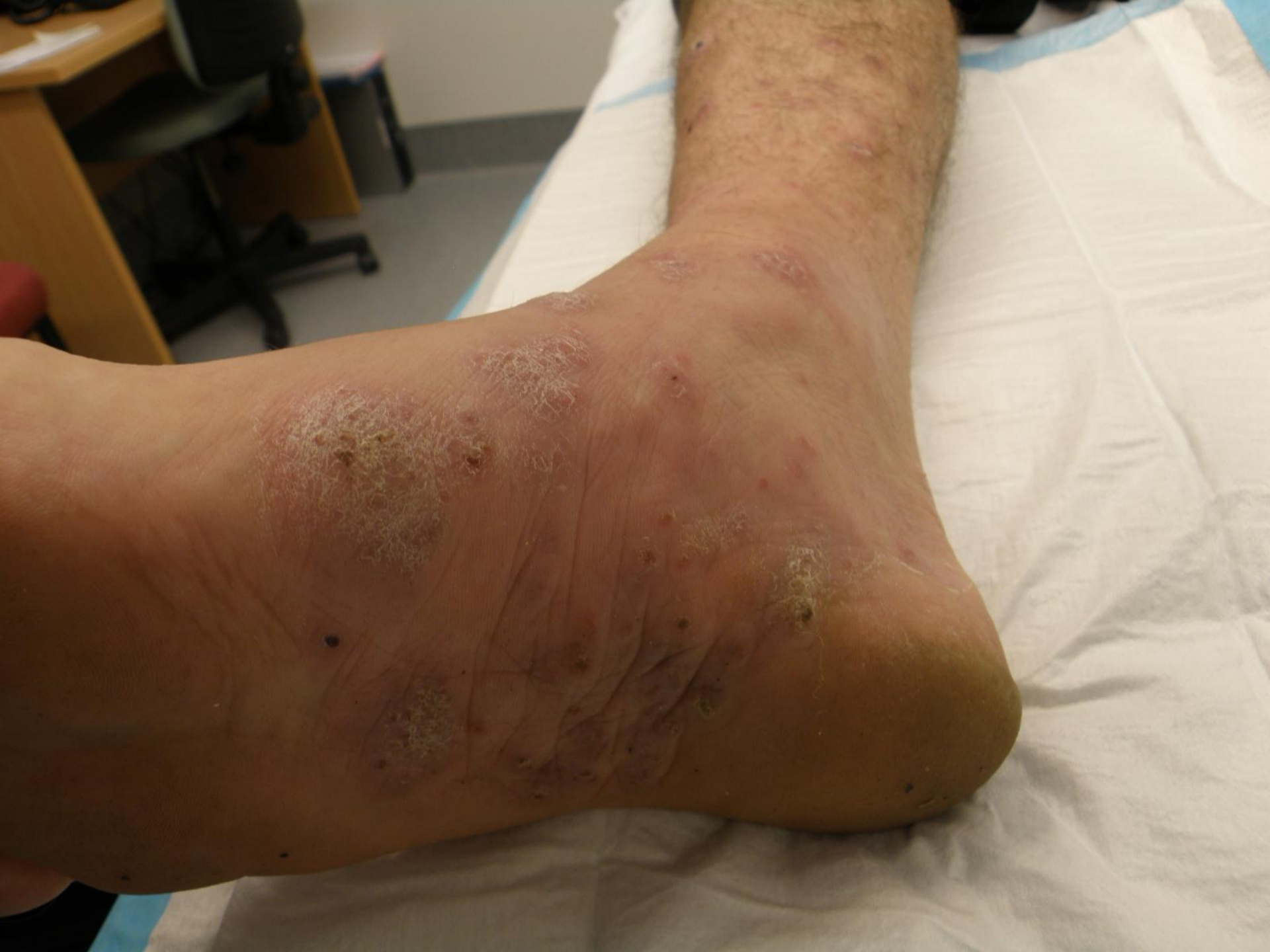


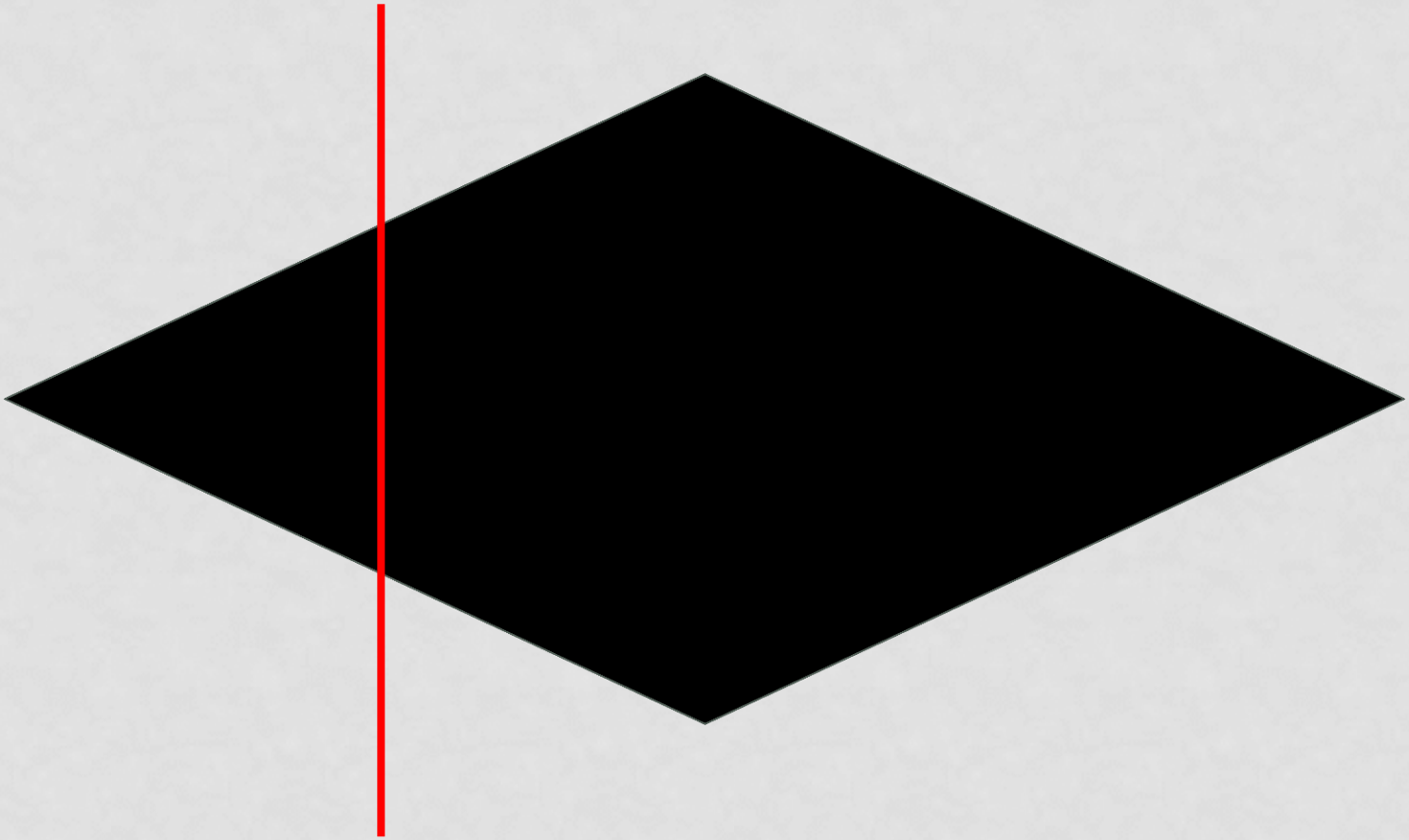
POINT 16

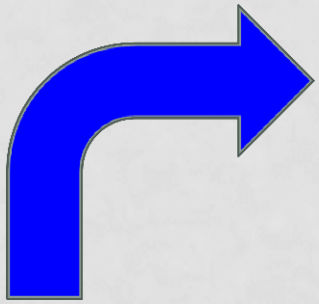
- Provide clinical information

POINT 17

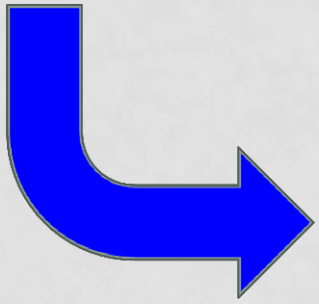
- Cut the end off an incisional biopsy for culture



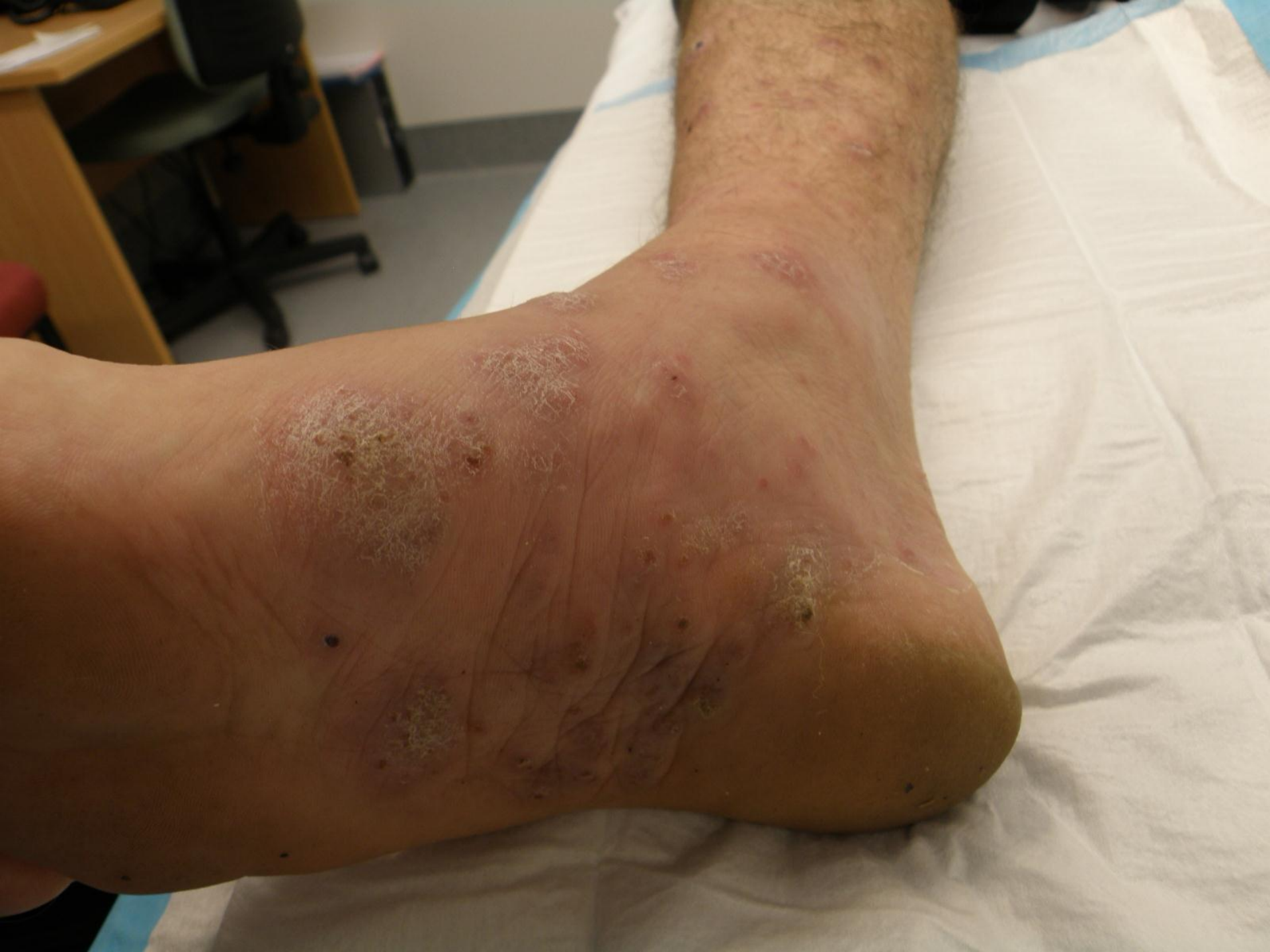




HISTOLOGY



CULTURE

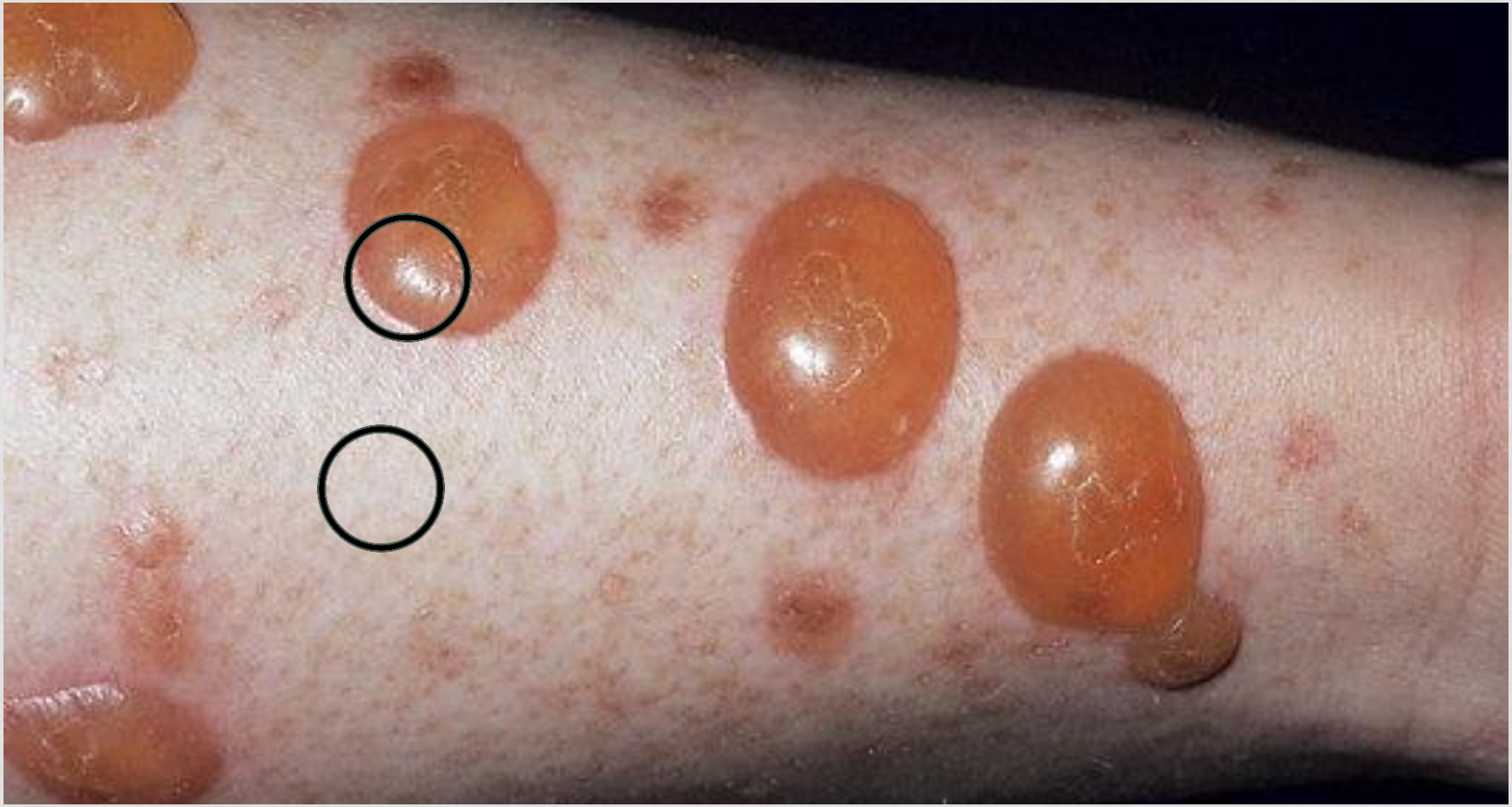


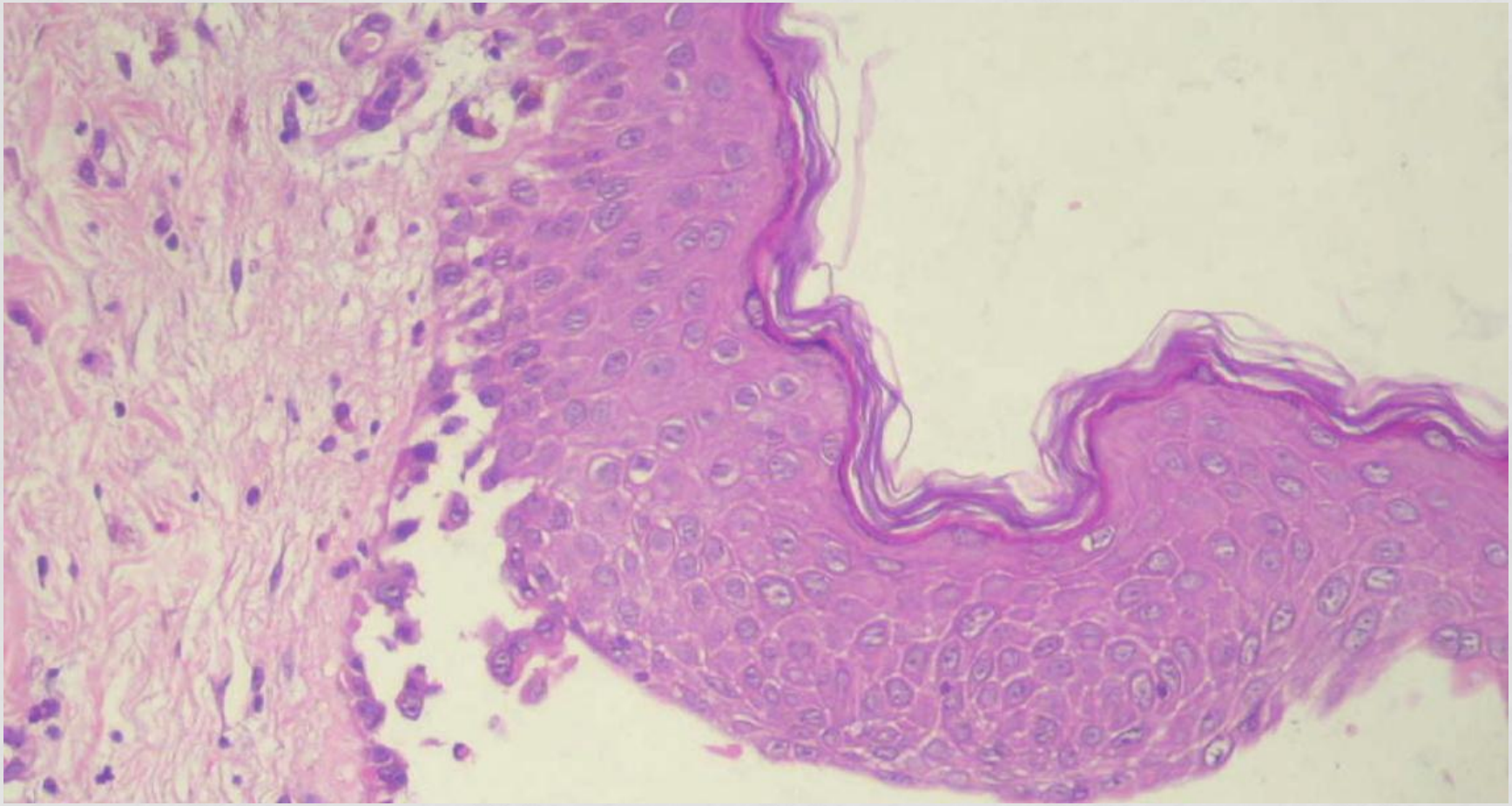
POINT 17

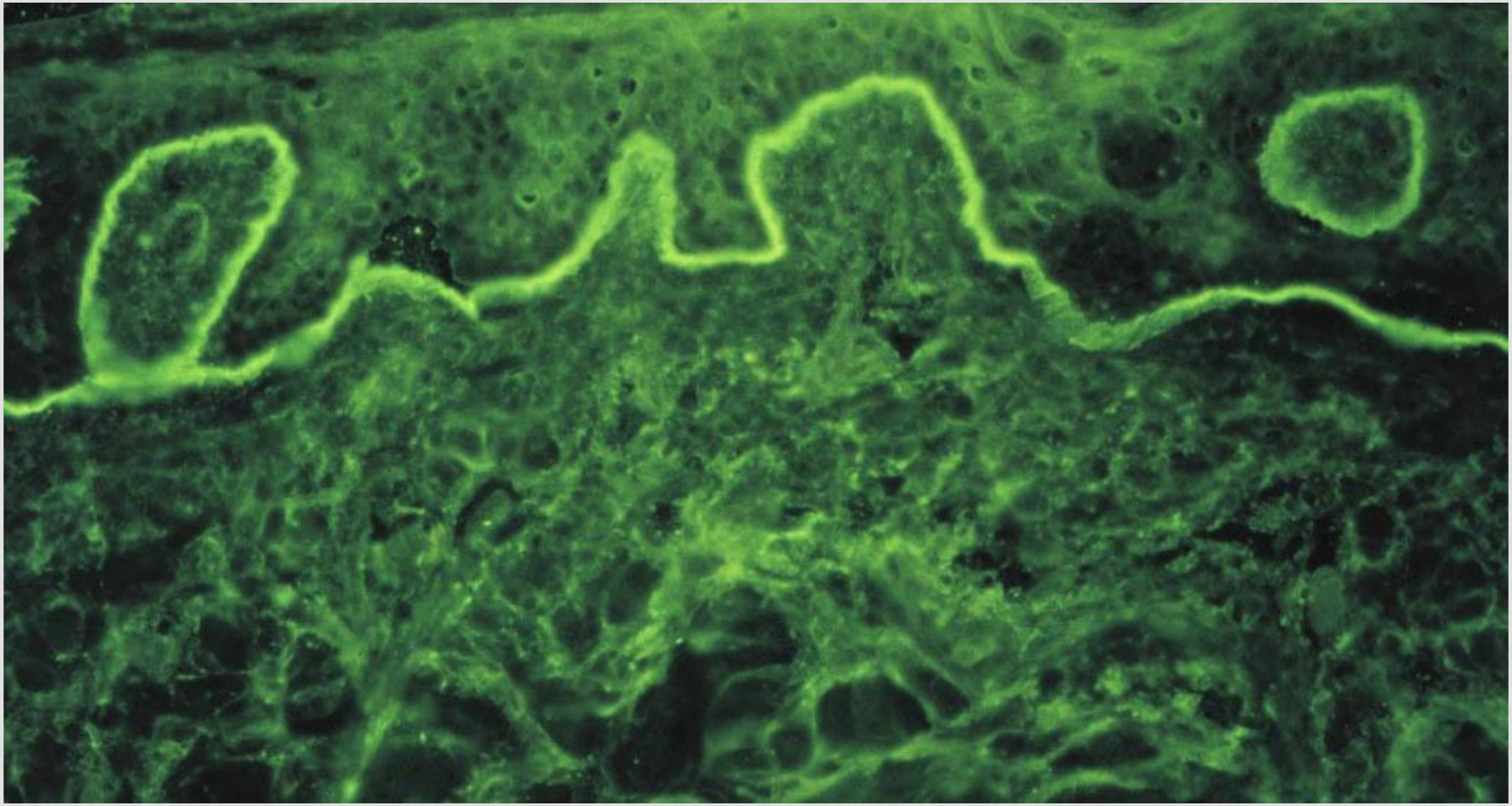
- Cut the end off an incisional biopsy for culture

POINT 18

- Take two biopsies for blistering conditions

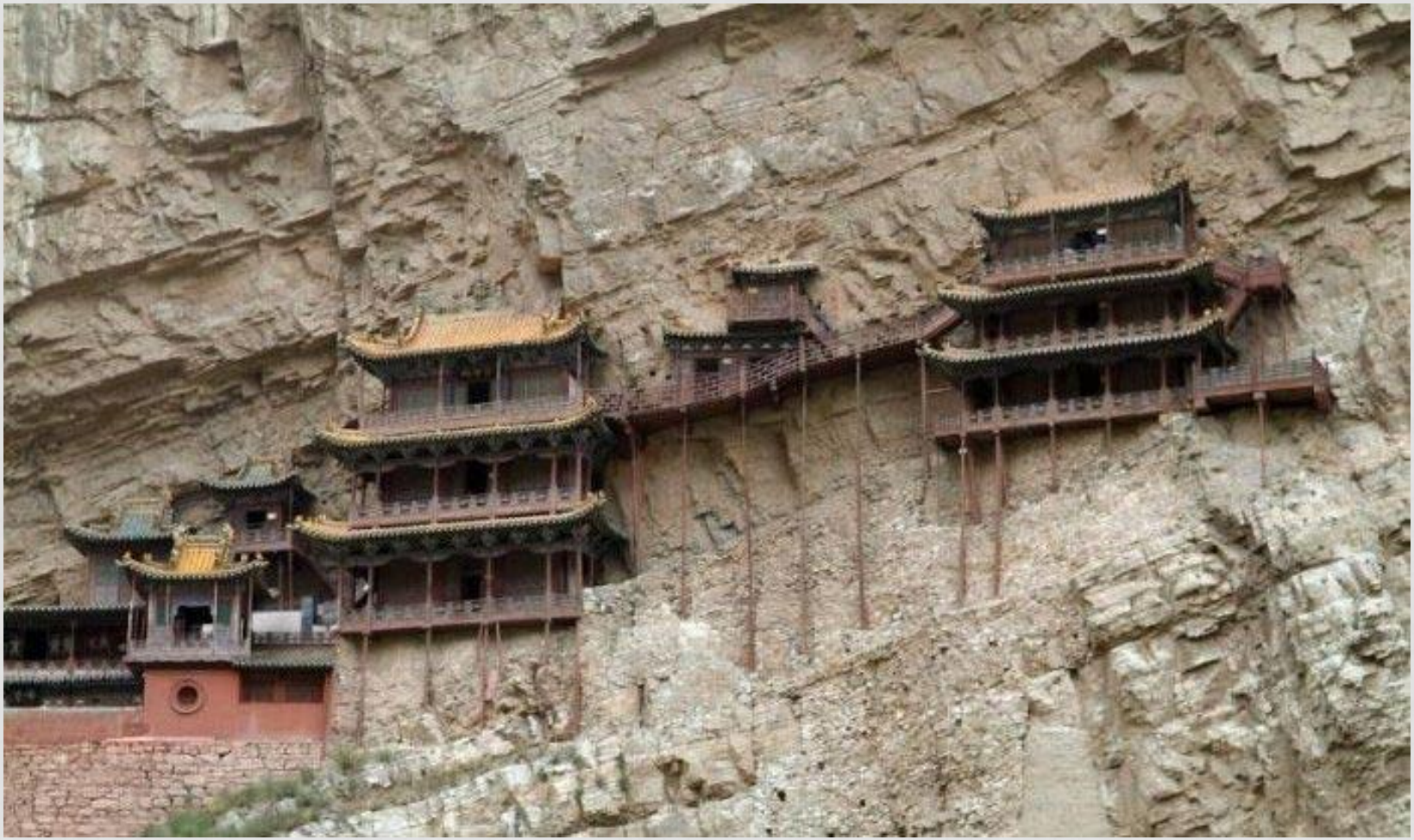






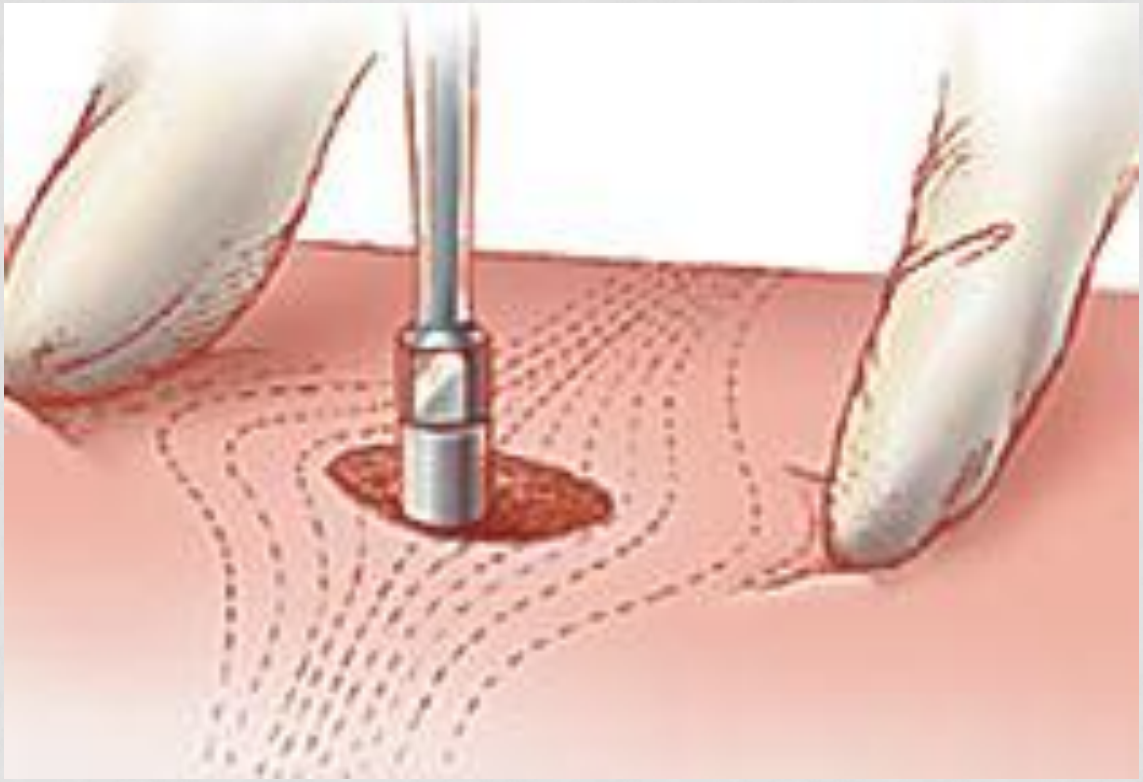
POINT 18

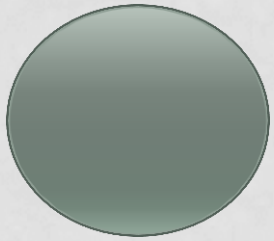
- Take two biopsies for blistering conditions

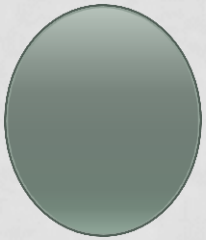


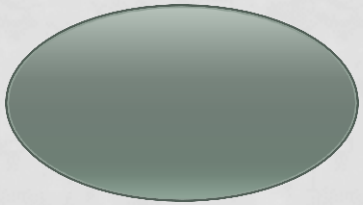
POINT 19

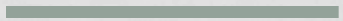
- Stretch the skin when taking punch biopsy











POINT 19

- Stretch the skin when taking punch biopsy

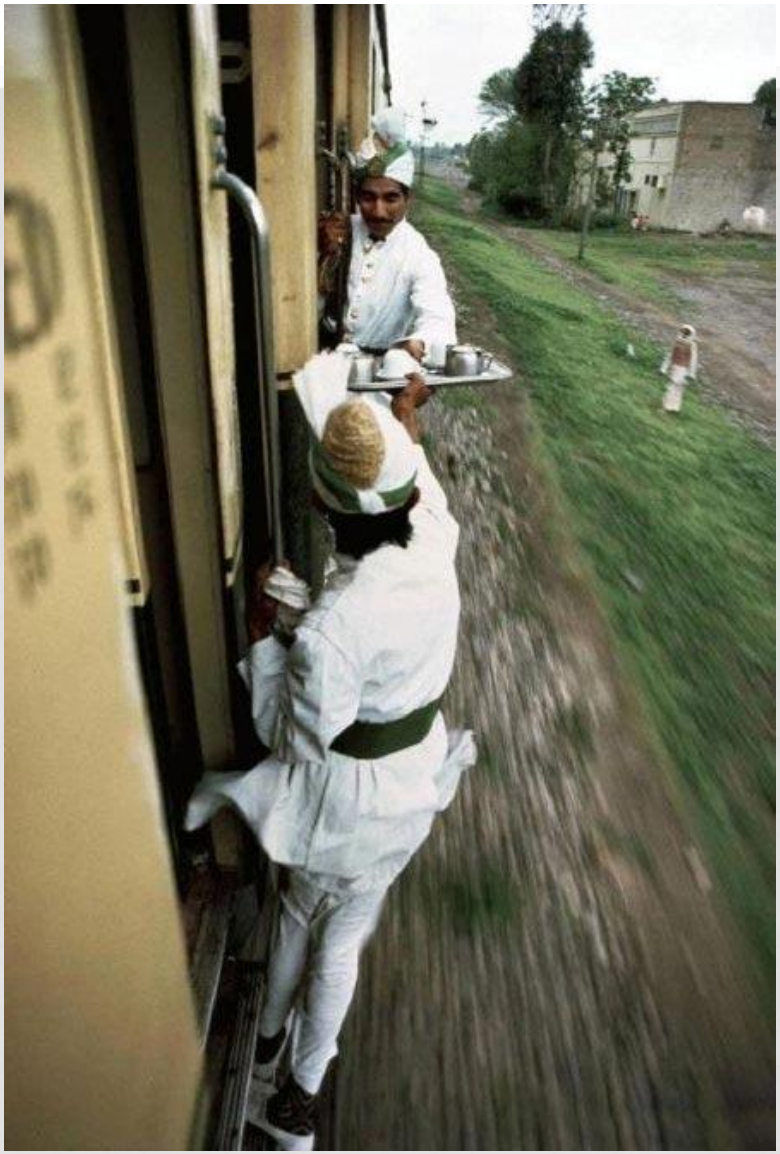
POINT 20

- Biopsy the base if large cutaneous horn

- Hypertrophic solar keratosis vs squamous cell carcinoma

POINT 20

- Biopsy the base if large cutaneous horn



POINT 21

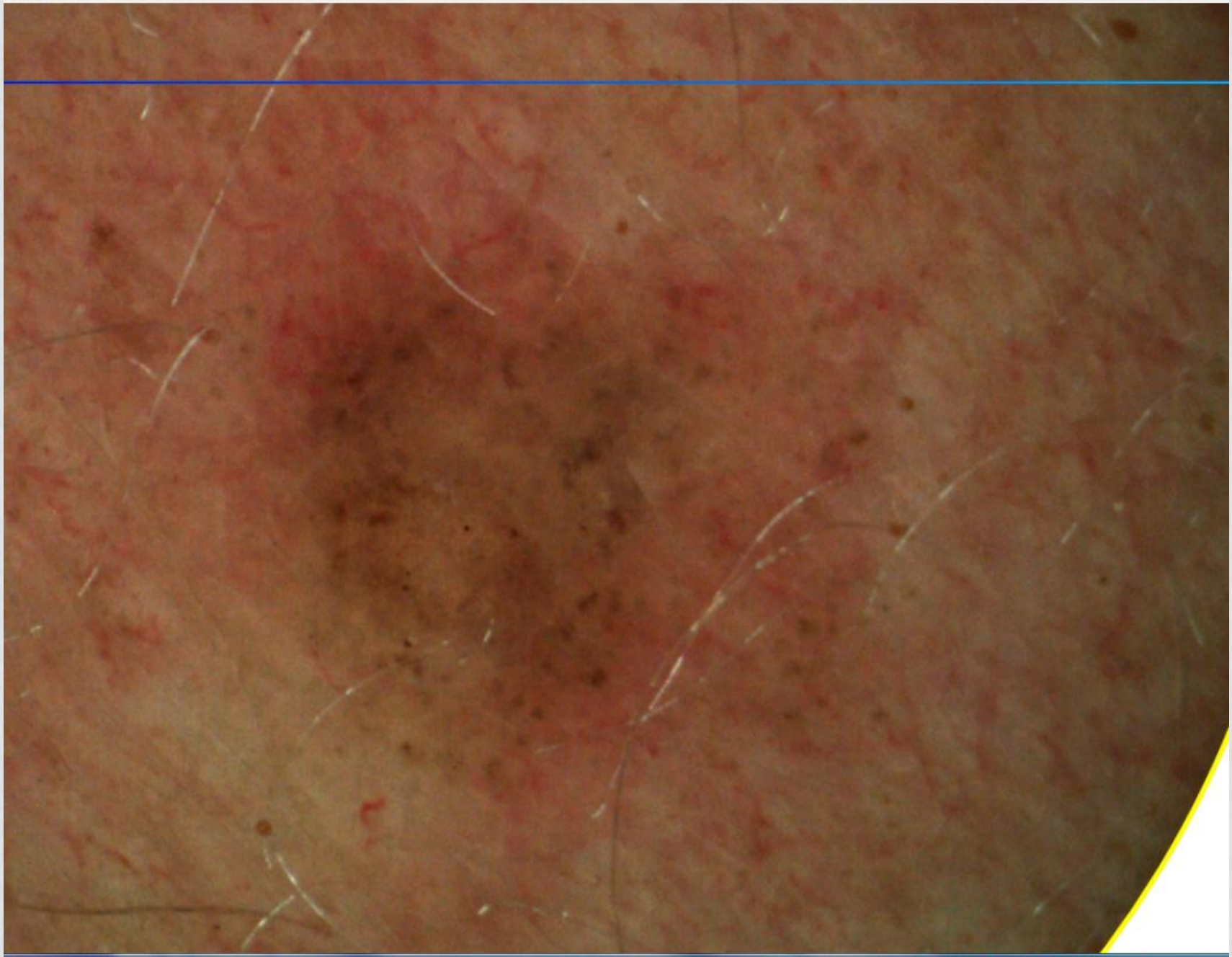
- Request adjunctive genetic tests for difficult melanocytic lesions

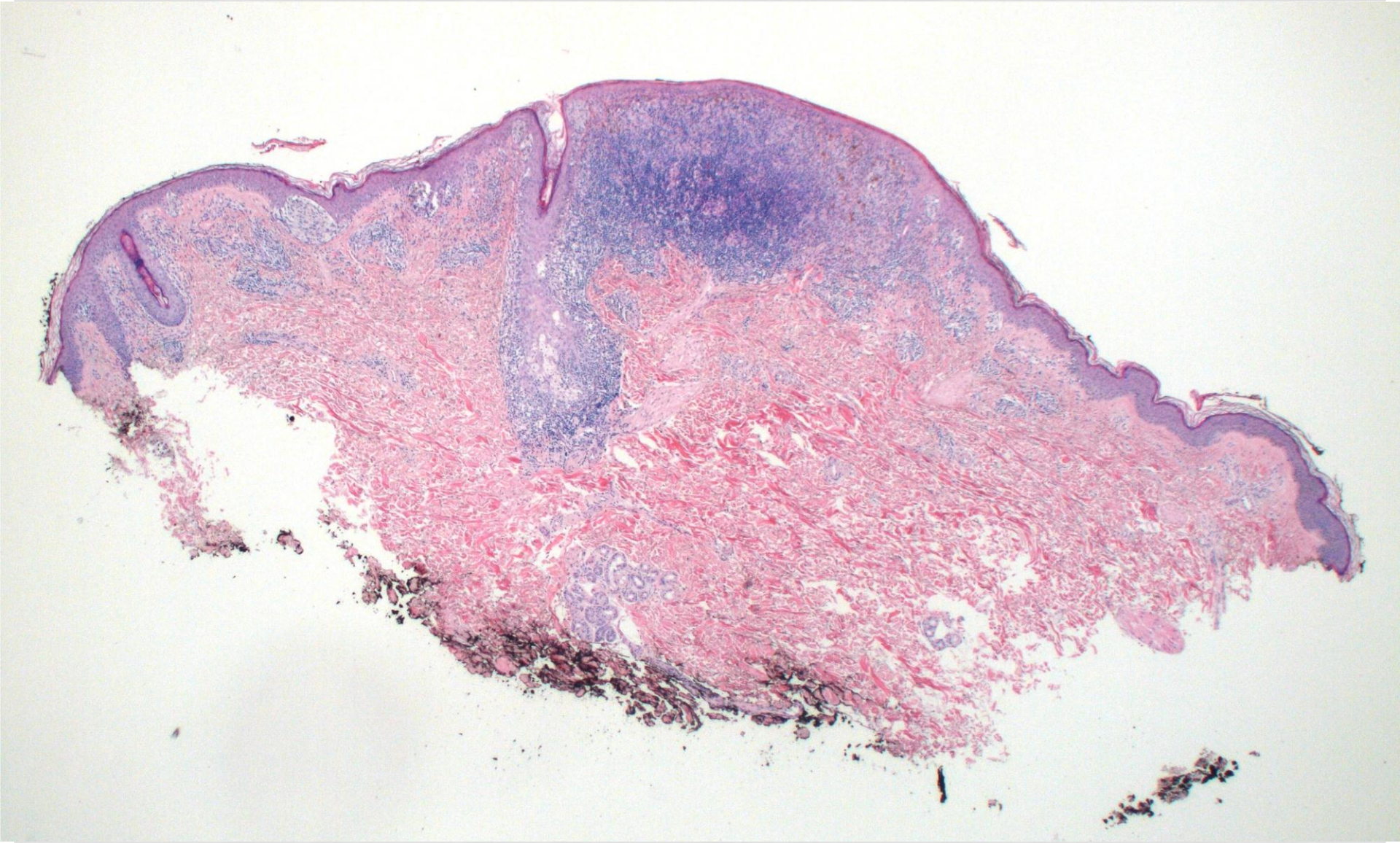
MOLECULAR TESTS IN HISTOLOGY

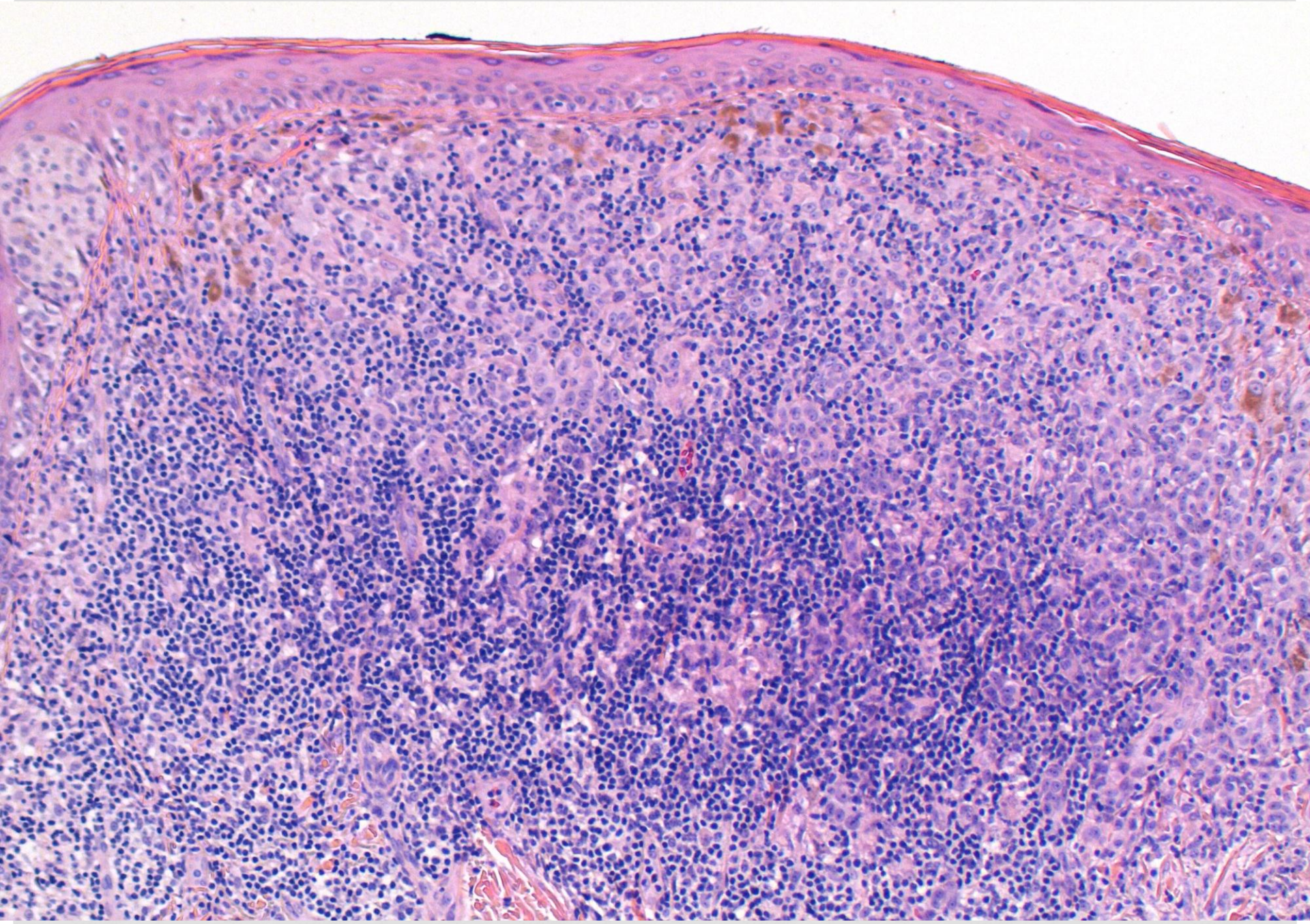
- Diagnostically ambiguous lesions
  - eg Atypical Spitz Naevi
- FISH
- Array Comparative Genomic Hybridisation
- Histology adjunct

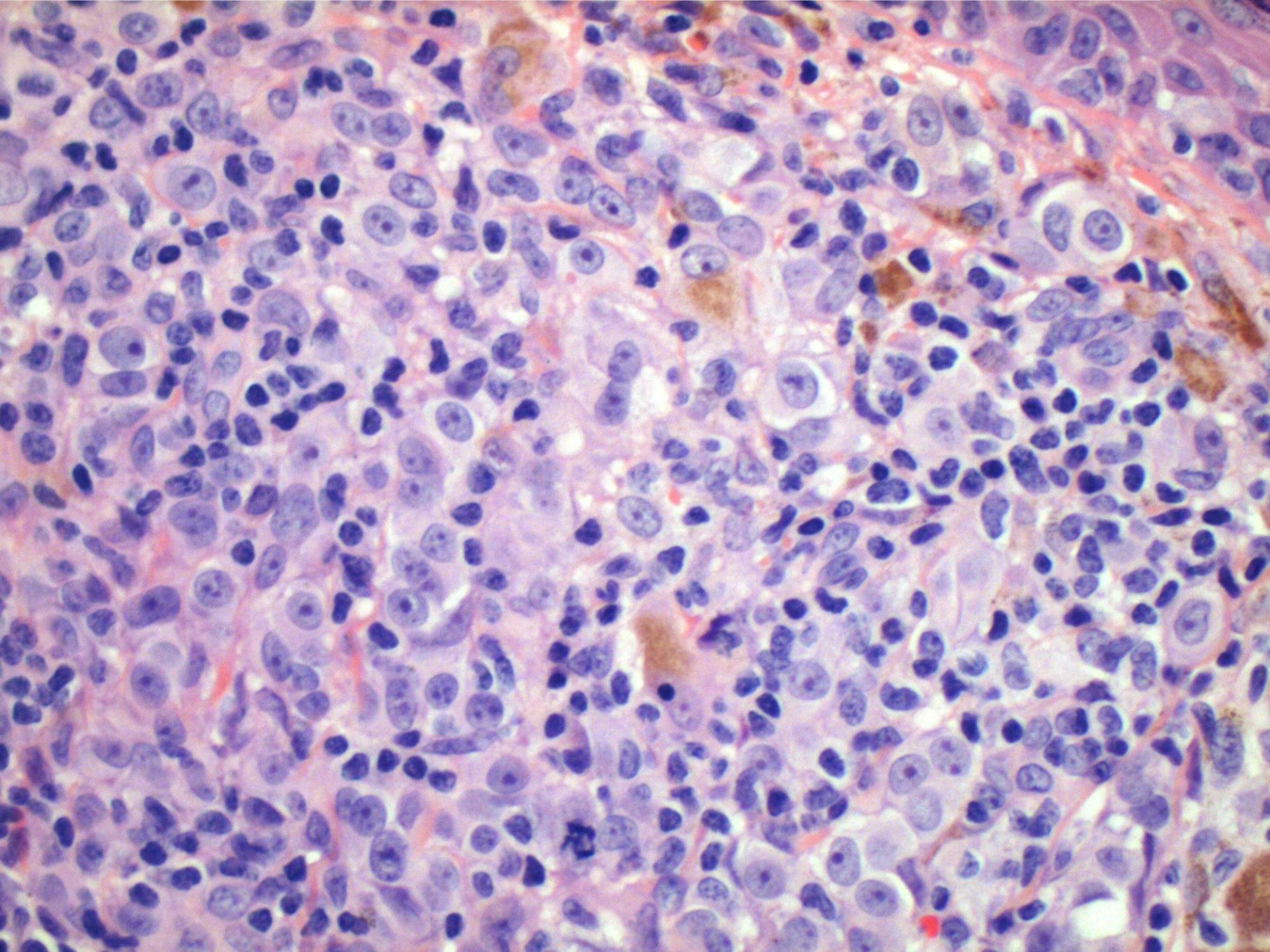
CASE EXAMPLE

- Mrs TW
- 35 y/o
- Changing mole L upper arm

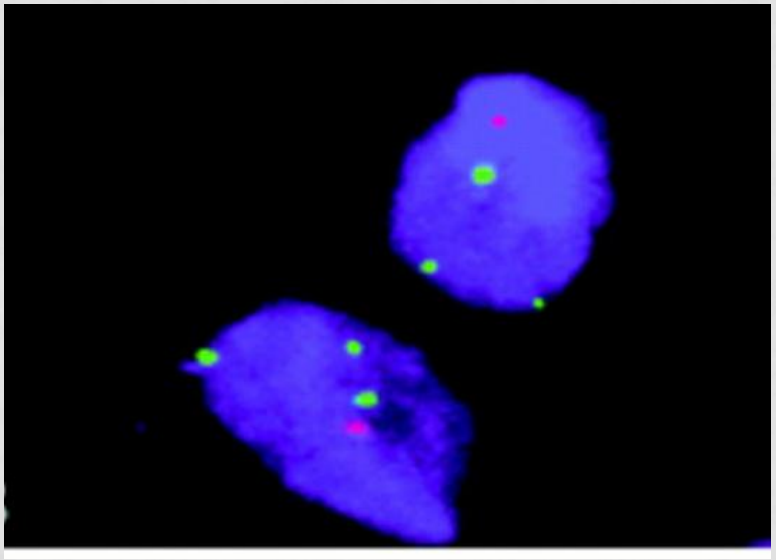




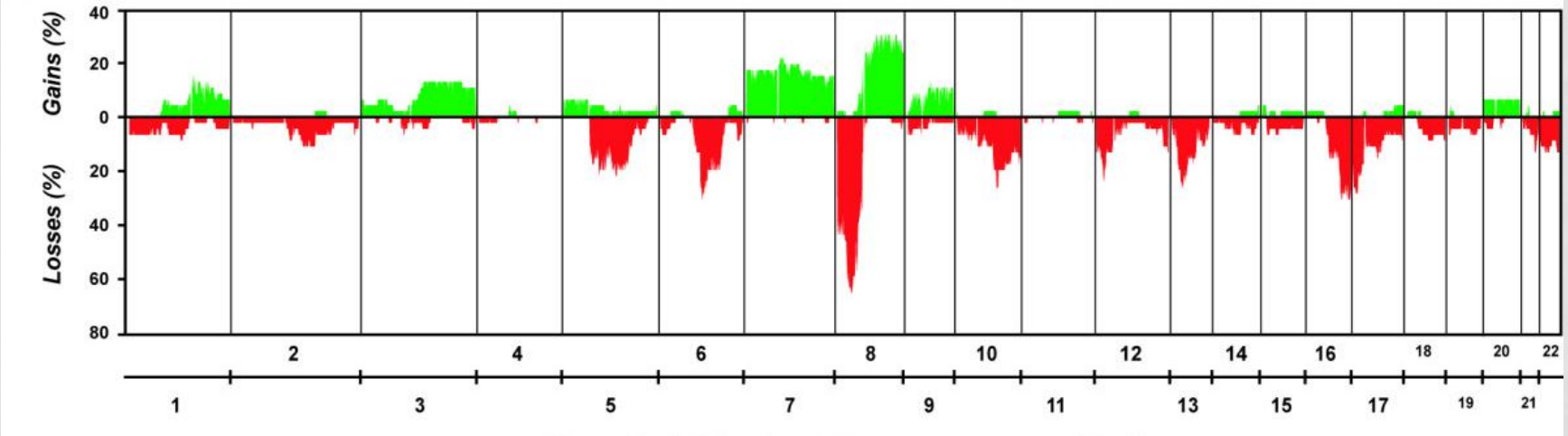




FISH



ARRAY CGH

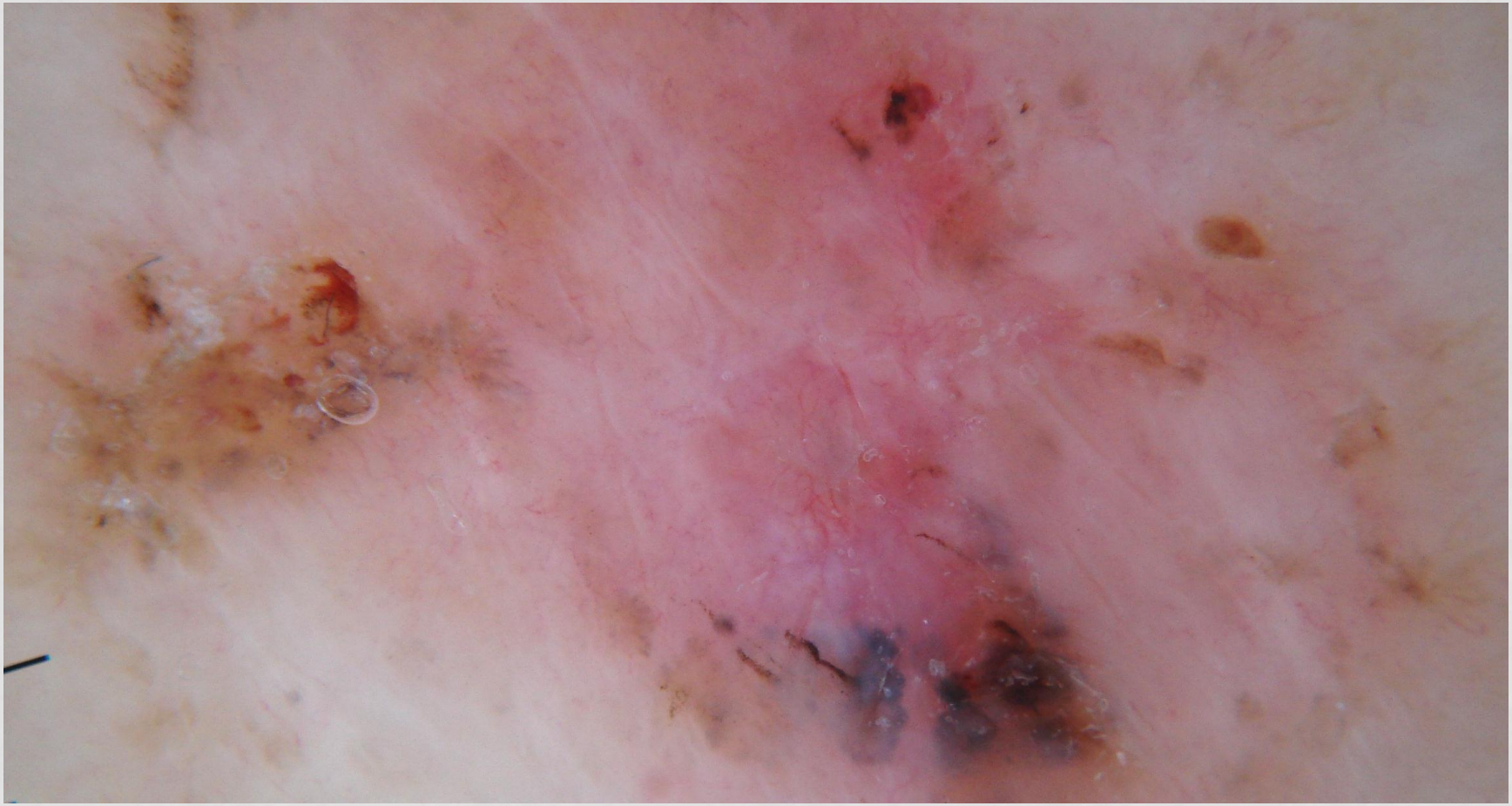

Gains (%)
Losses (%)
40
20
0
20
40
60
80
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

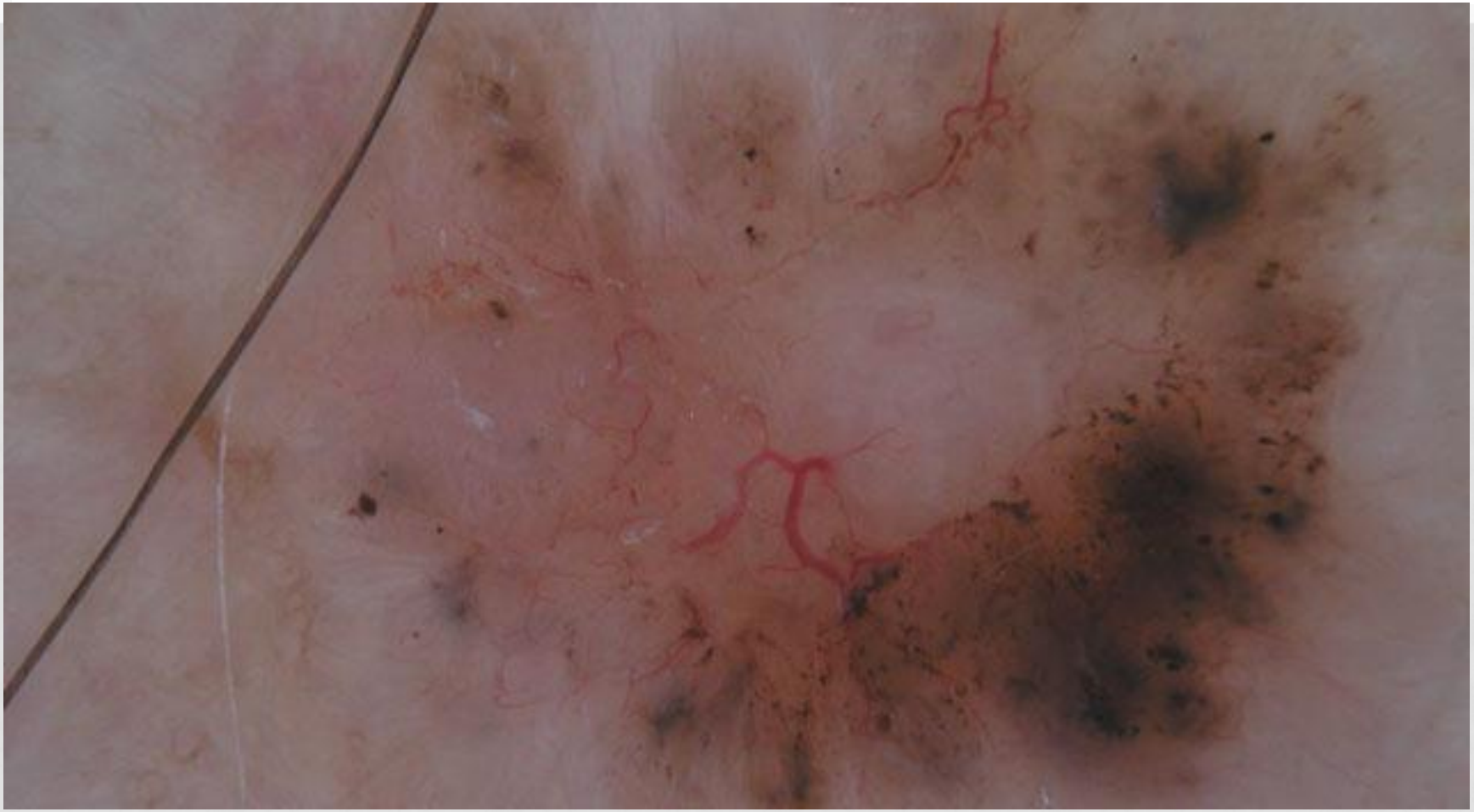
POINT 21

- Request adjunctive genetic tests for difficult melanocytic lesions

POINT 22

- Look for pigmentation in subtle basal cell carcinomas



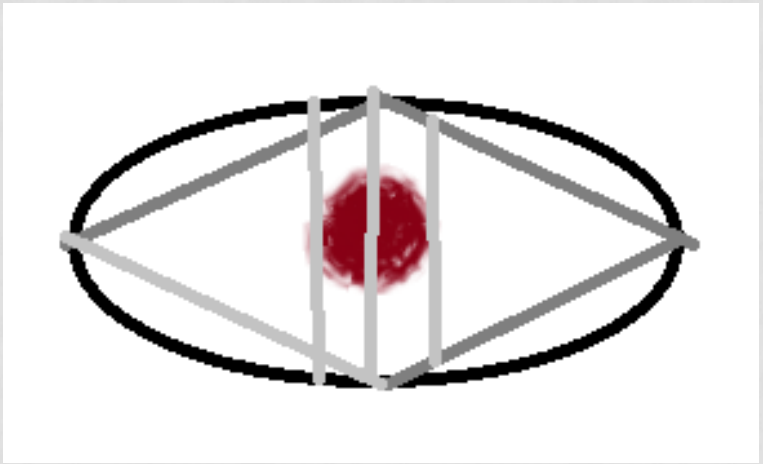


POINT 22

Look for pigmentation in subtle basal cell carcinomas

POINT 23

- Excise facial melanoma in situ with staged margin assessment
  - Staged excision
    - Paraffin



- 5mm frequently inadequate
- Complete excision
  - 6mm 86%
  - **9mm** 99%

J Am Acad Dermatol. 2012 Mar;66(3):438-44

POINT 23

- Excise facial melanoma in situ with staged margin assessment
  - Staged excision
    - Paraffin

END