
بسم الله الرحمن الرحيم

ASSISTANT PROFESSOR

DR GHAFOOR ULLAH

DERMATOLOGY DEPARTMENT

MTI-HMC PESHAWAR

DEFINITION

Skin is the largest organ in the body. In a 70 kg individual, it weighs over 5 kg and covers a surface area approaching 2 m2.

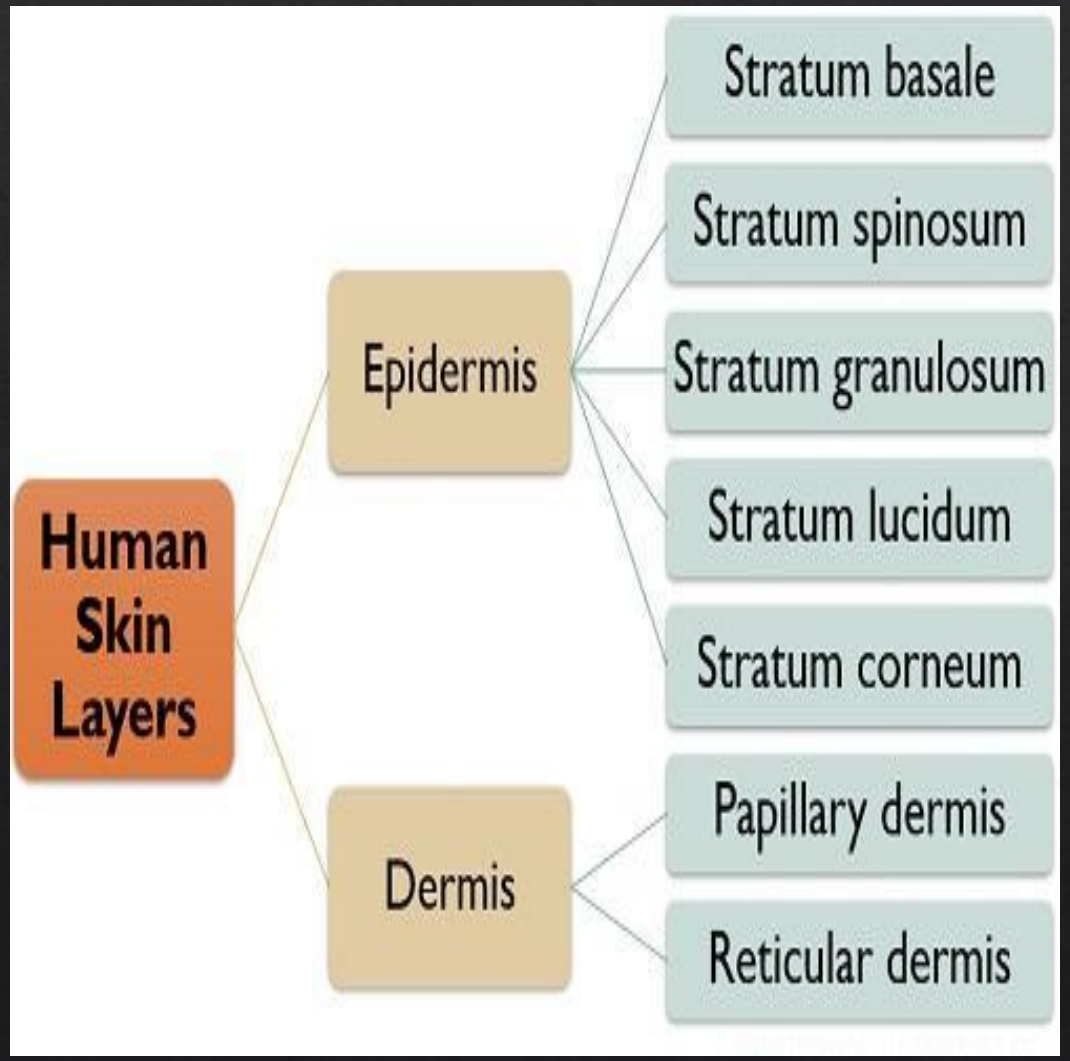
Epidermis.

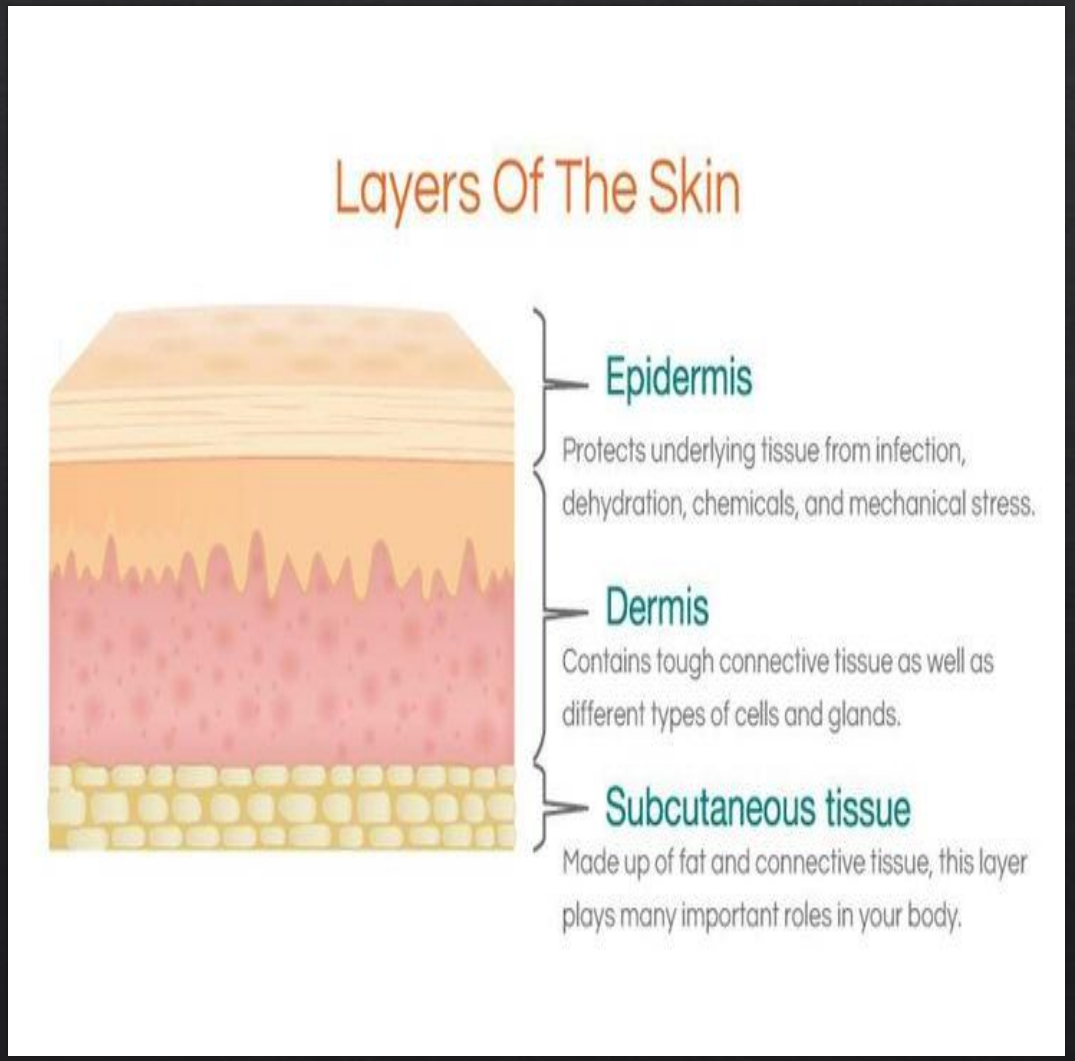
Dermal–Epidermal basement membrane .

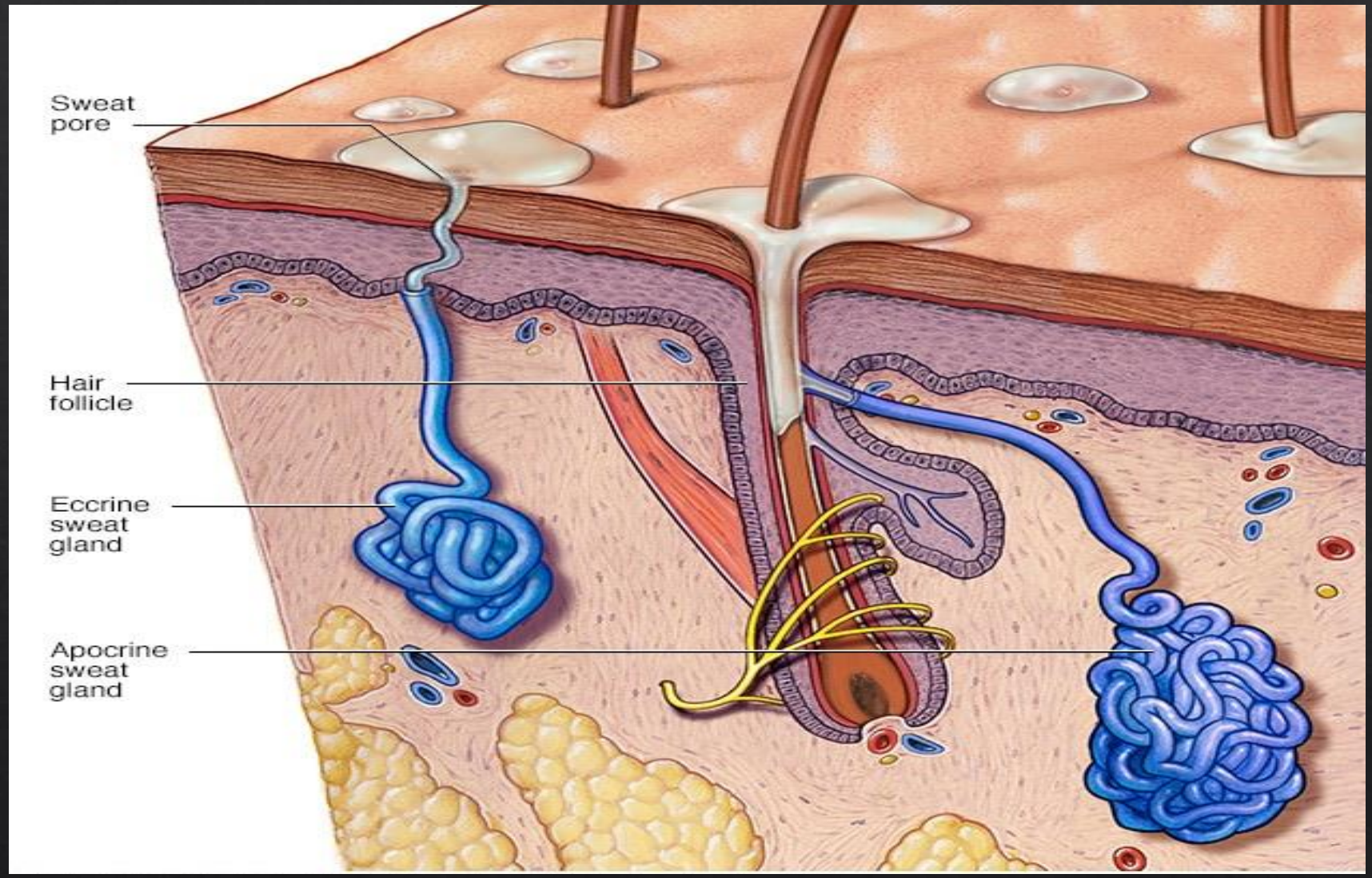
Dermis.

Hypodermis.

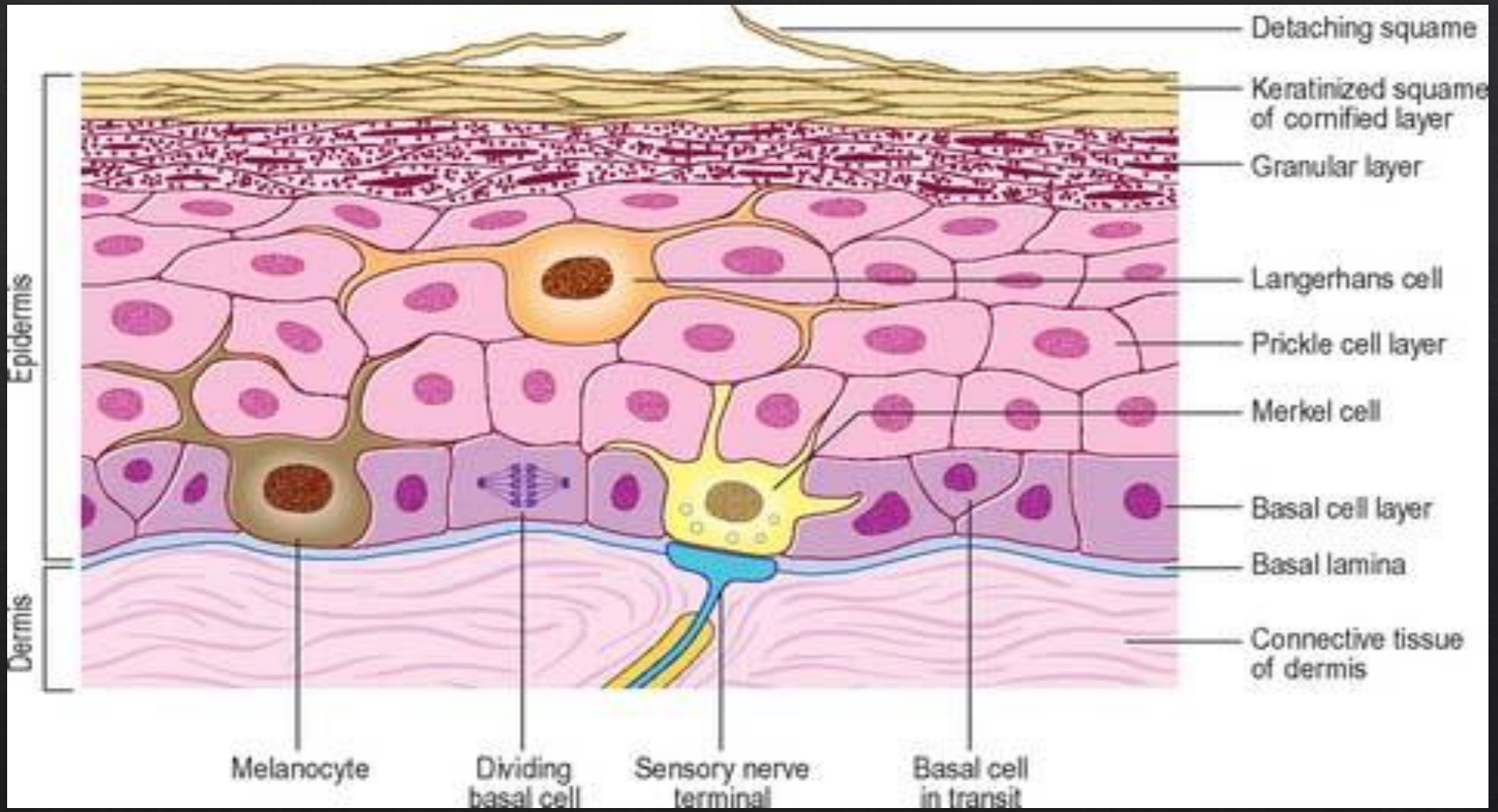
SKIN STRUCTURE



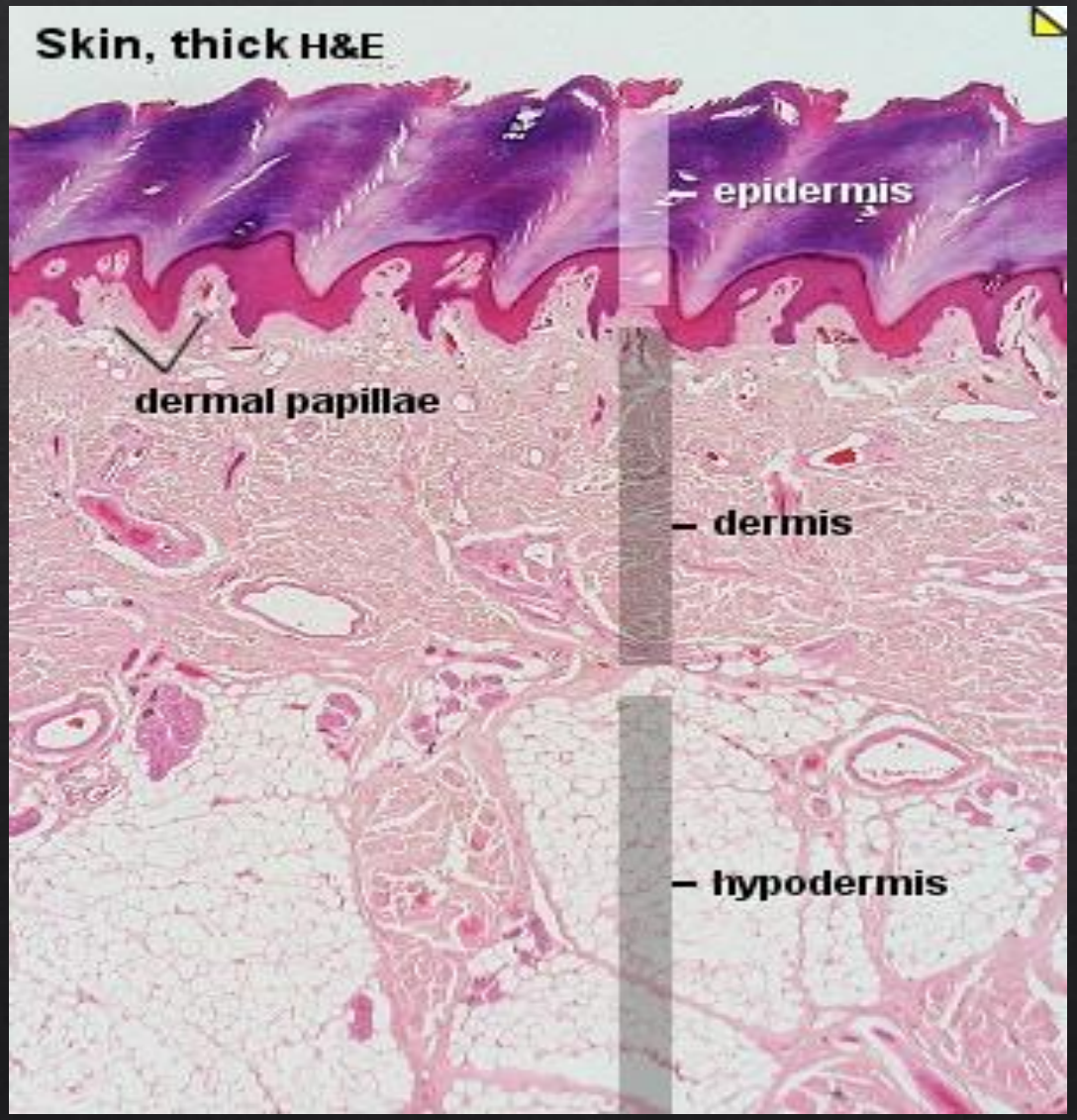


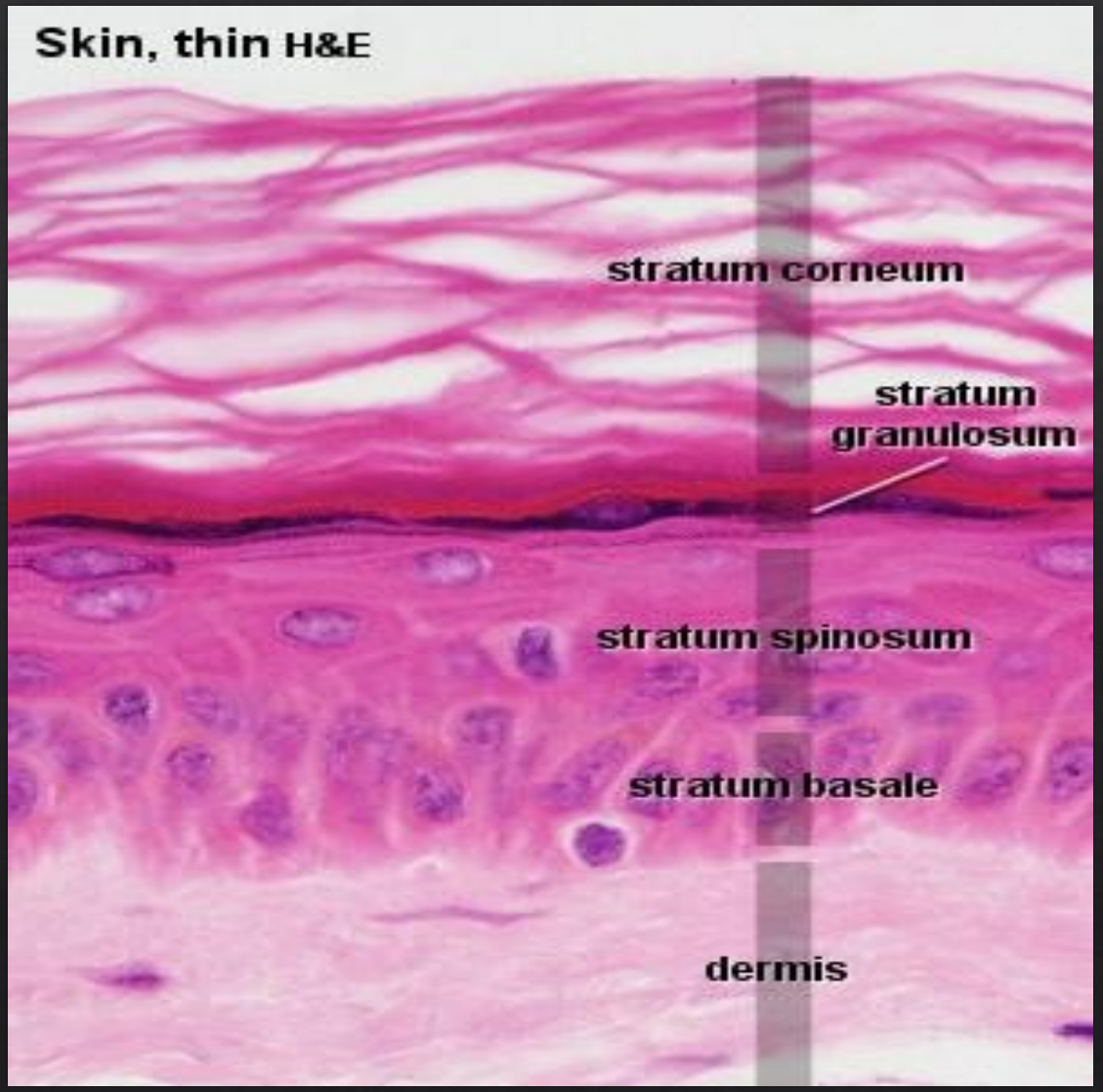

Sweat pore
Hair follicle
Eccrine sweat gland
Apocrine sweat gland

COMPONENTS OF SKIN



HISTOPATHOLOGY





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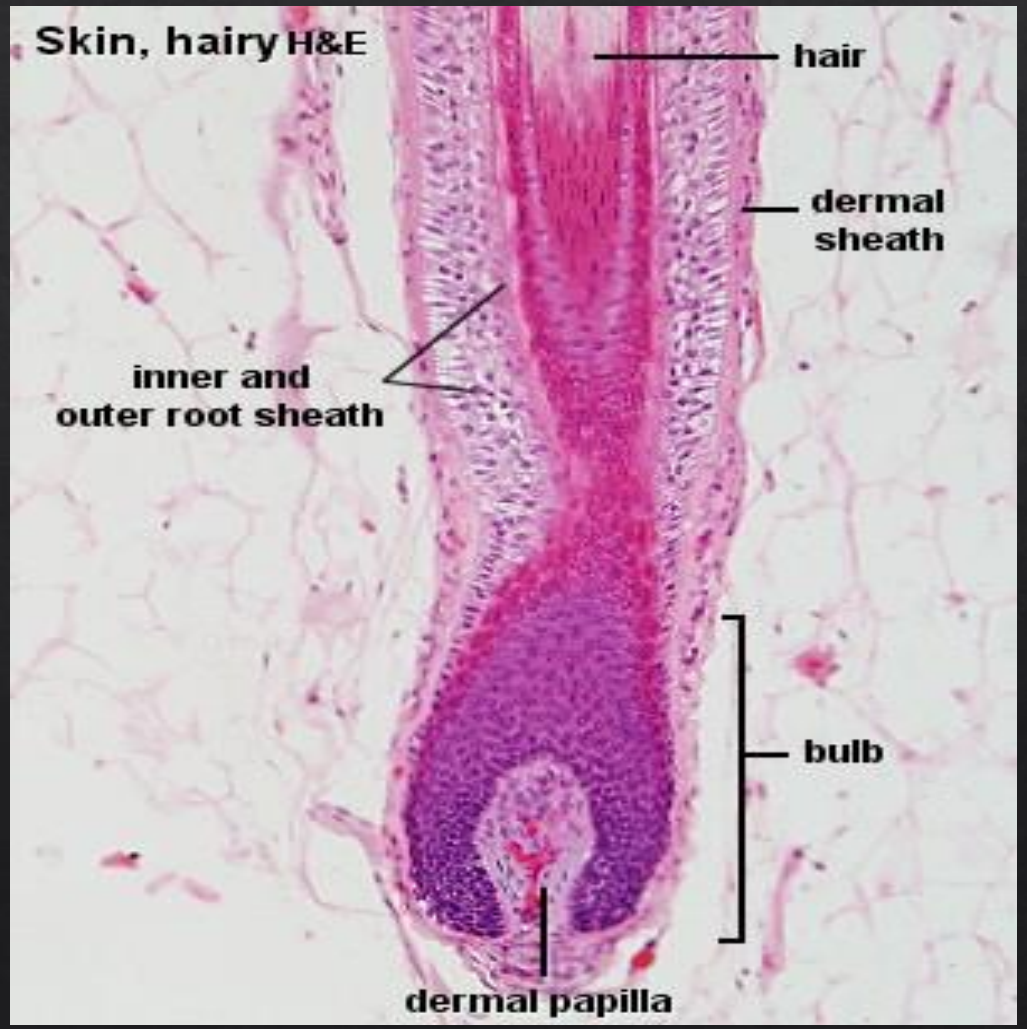
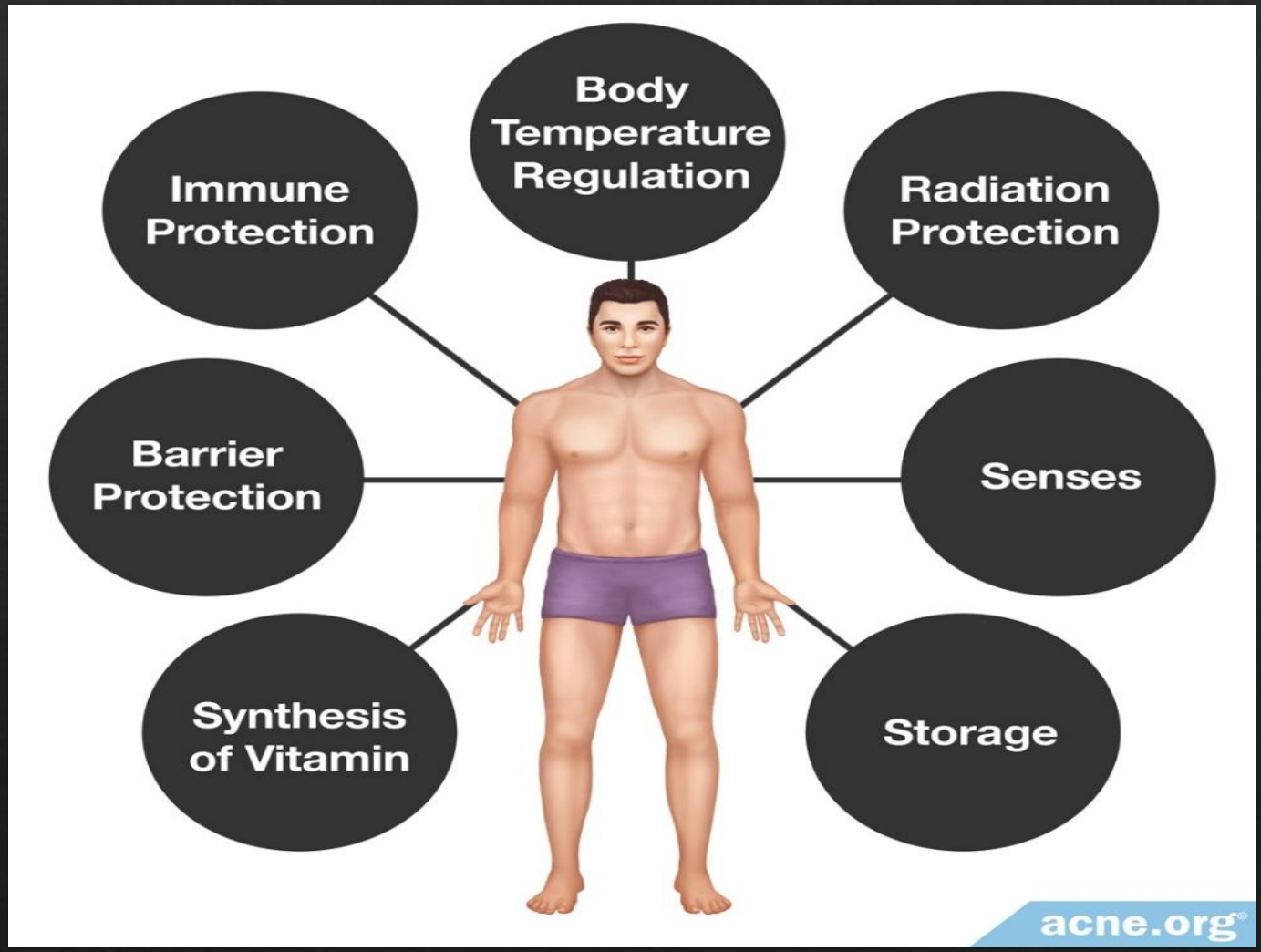


FUNCTIONS


Body Temperature Regulation
Immune Protection
Radiation Protection
Barrier Protection
Senses
Synthesis of Vitamin
Storage
acne.org

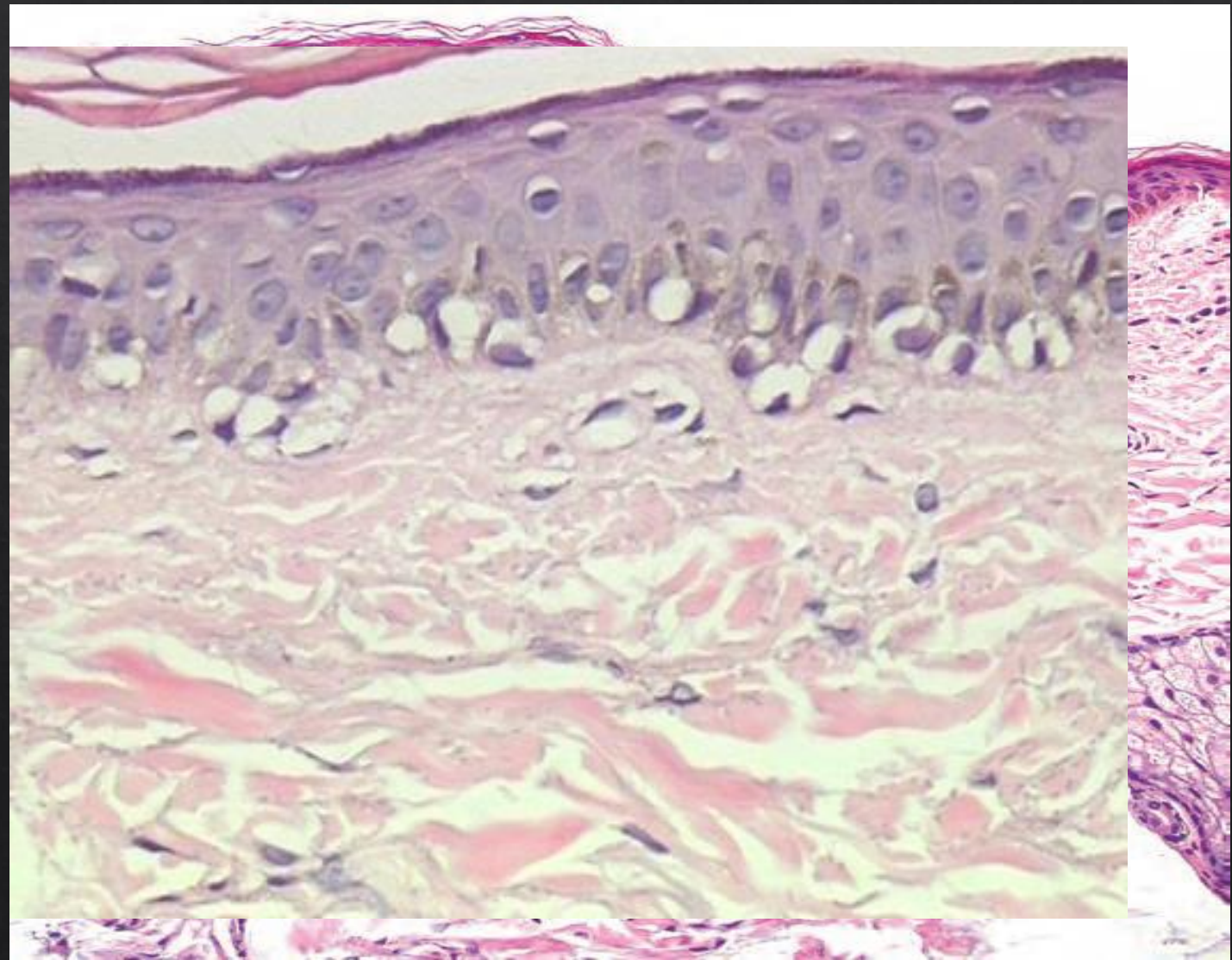
FRECKELS

Small reddish or pale to dark brown macule with a poorly defined border ,on sun exposed areas of skin .

HISTOPATHOLOGY

Hyper pigmented basal cell layer without alteration of the epidermal architecture .

The number of melanocytes is normal.

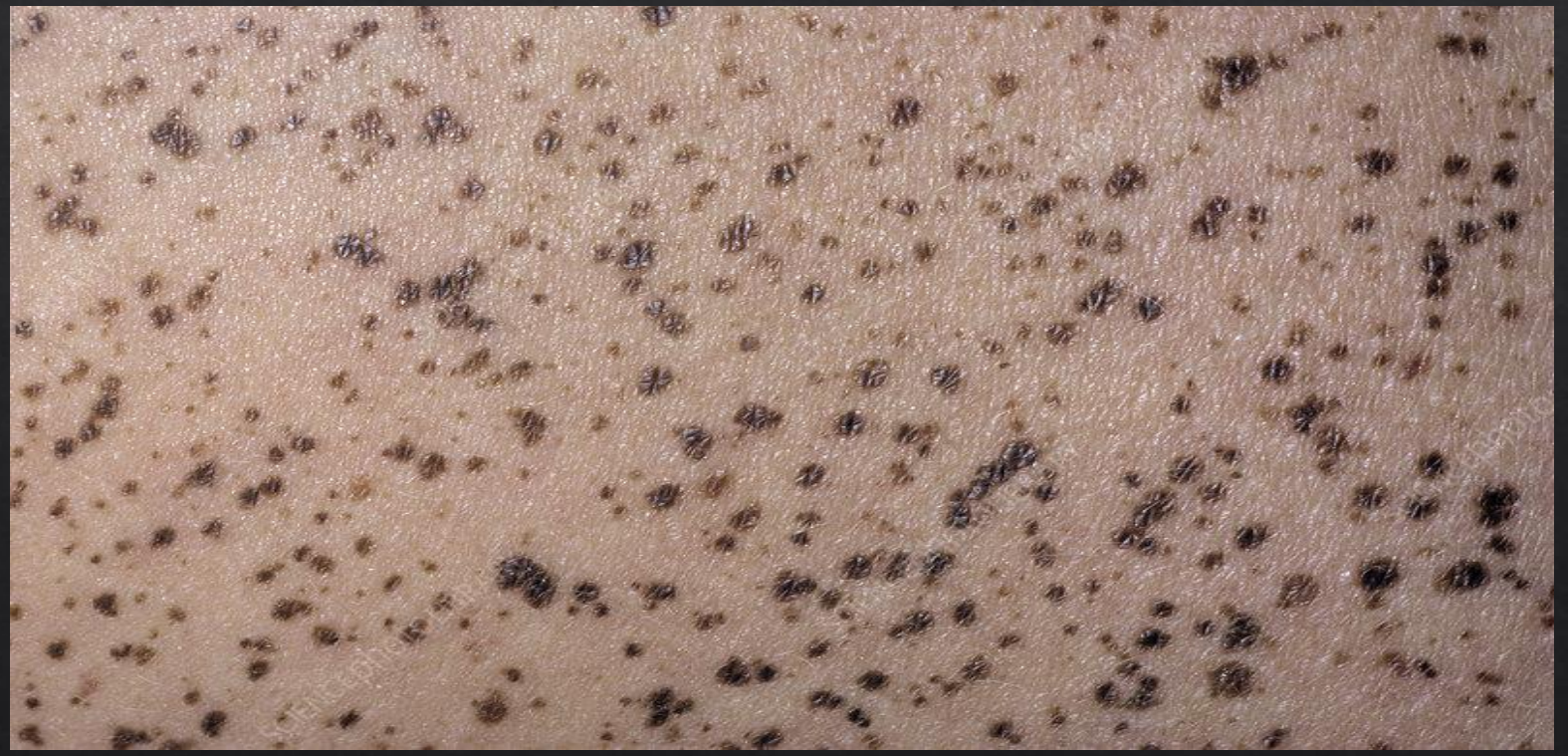


TREATMENT

- No treatment is required.
- Photoprotection
- Chemical peels, lasers, topical depigmenting drugs and can be used for cosmetic reasons

LENTIGINES

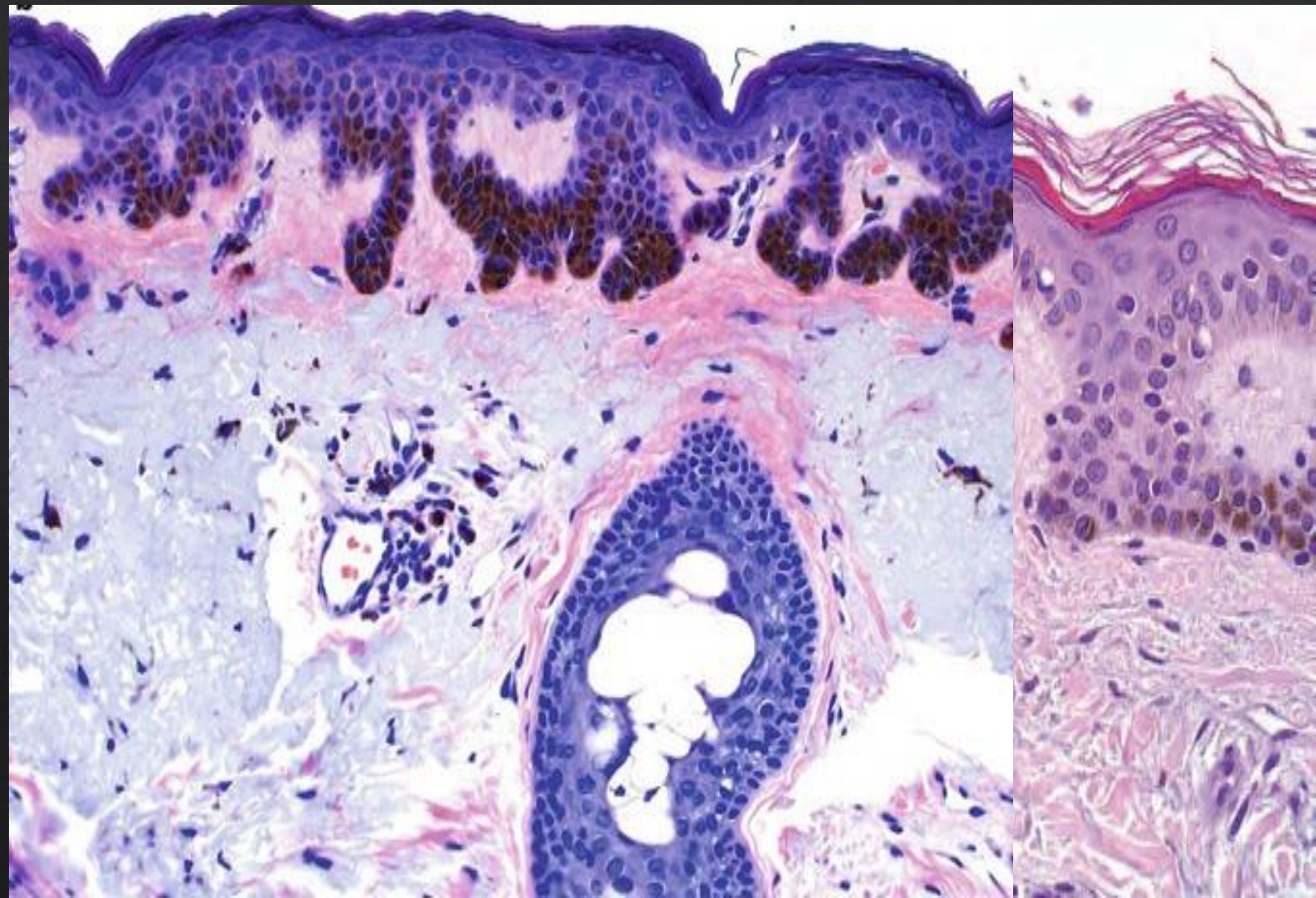
They are hyper pigmented macules that do not fade away in the absence of UV exposure.



HISTOPATHOLOGY

Increased melanin on the basal cell layer

increased numbers of singly arranged melanocytes.



TYPES OF LENTIGO

SIMPLE LENTIGO

SOLAR LENTIGO

INK SPOT LENTIGO

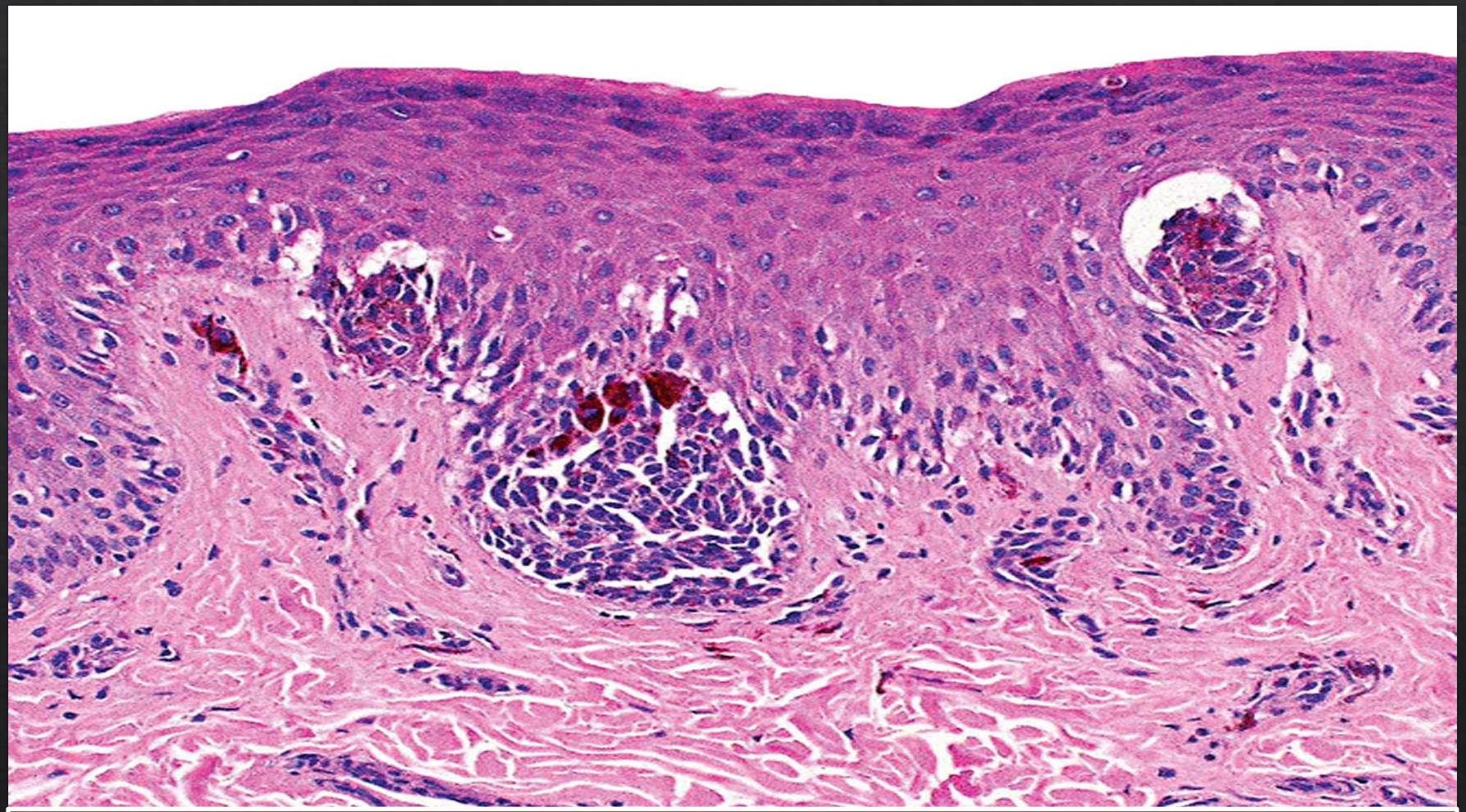
MELANOCYTIC NEVI

TYPES OF NEVI

- JUNCTIONAL NEVUS
- INTRA DERMAL NEVUS
- COMPOUND NEVUS

JUNCTIONAL NEVUS

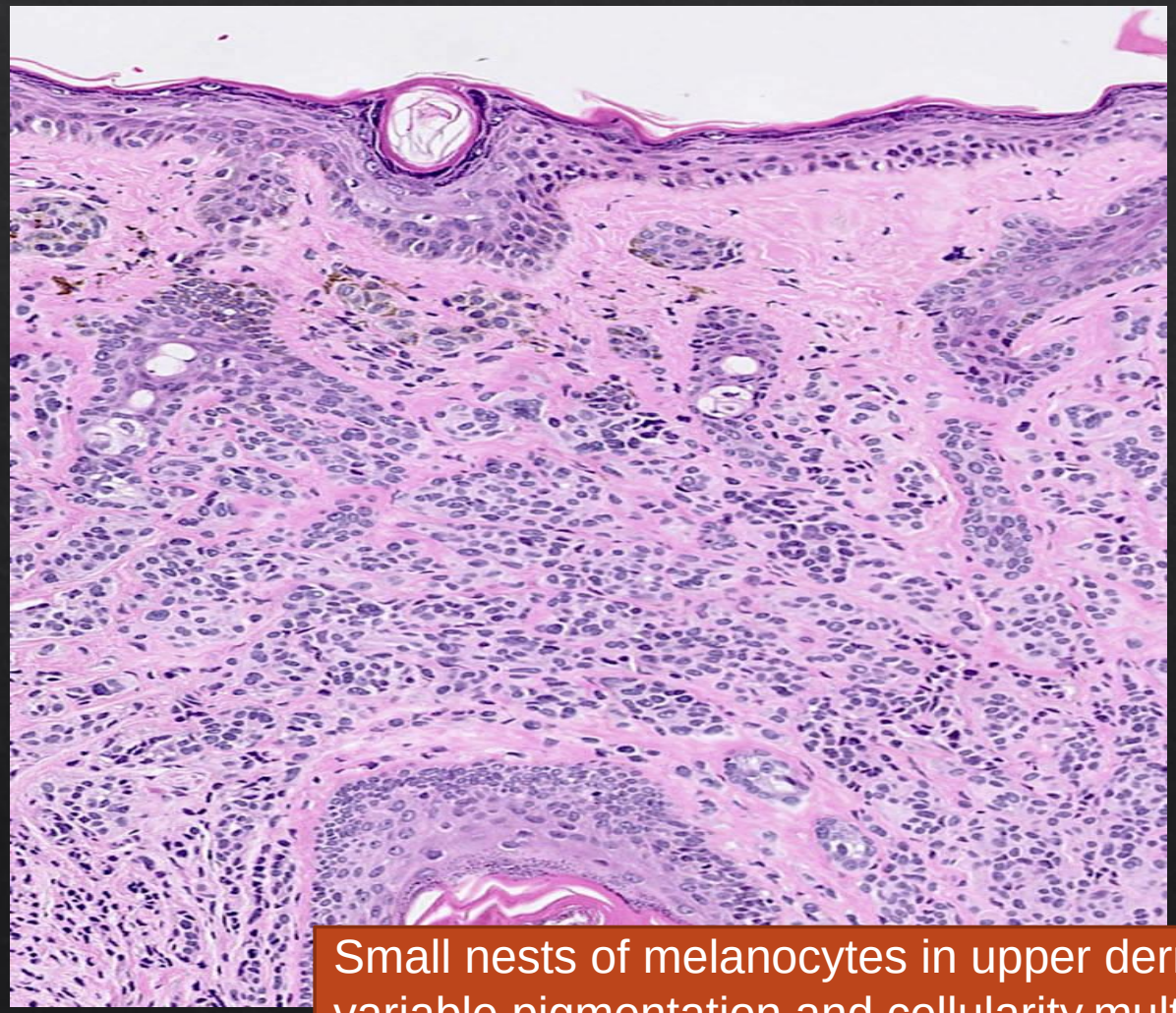
HISTOPATHOLOGY



Along the DEJ single naevus cells are present in basal layer

DERMAL NEVUS

HISTOPATHOLOGY



Small nests of melanocytes in upper dermis, often around pilosebaceous units, with variable pigmentation and cellularity,multinucleated melanocytes

COMPOUND NEVUS

HISTOPATHOLOGY

Both junctional and dermal component

TREATMENT

Junctional :

Not needed

Excision for cosmetic reasons

Laser for flat lesions.

Dermal and Compound Nevus:

Shave and cautery (dermal electrosurgical shave excision)

PREMALIGNANT LESIONS

SOLAR/ACTINIC LENTIGO

HISTOPATHOLOGY

Solar elastosis of the dermis and photo activation features of melanocytes are usually present

TREATMENT

- **Photo protection**
- Cryotherapy
- Topical retinoids
- Q-switched ruby laser treatment

SEBORRHEIC KERATOSIS

HISTOPATHOLOGY

Accumulation of normal but immature keratinocytes b/w the basal layer and the keratinizing surface of the epidermis.

TREATMENT

First line

• Curettage, cryotherapy

Second line

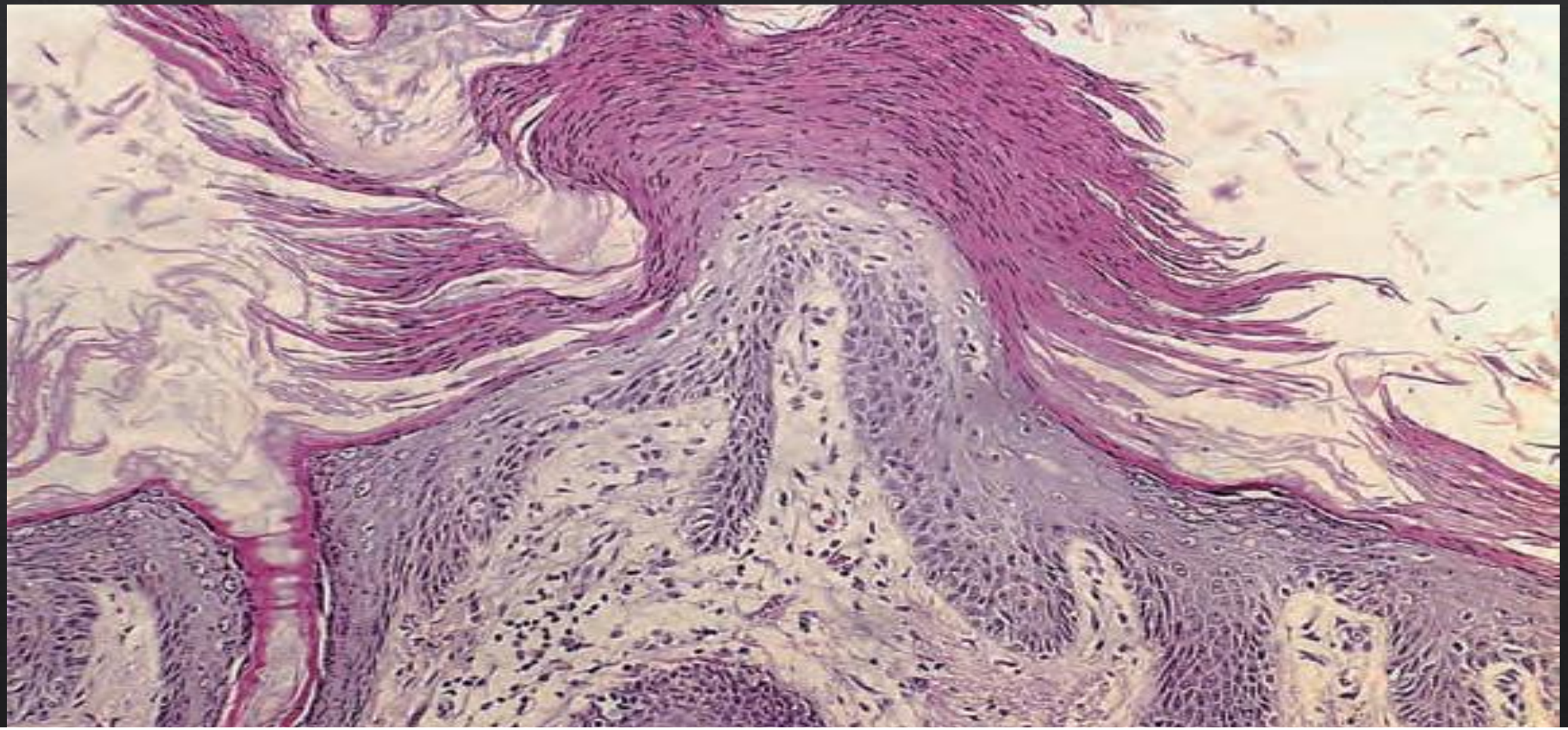
• Ablative or non-ablative lasers

Third line

• Medium depth chemical peels

ACTINIC KERATOSIS

HISTOPATHOLOGY



Solar elastosis, disordered epidermal keratinocyte maturation with cytological atypia,hyperkeratosis, parakeratosis ,hypogranulosis

TREATMENT

- Cryotherapy
- Curettage for thick AK
- salicylic acid
- 5% 5-fluorouracil cream

ALA or PDT

5% imiquimod cream

3% diclofenac in 2.5% hyaluron gel

CUTANEOUS HORN

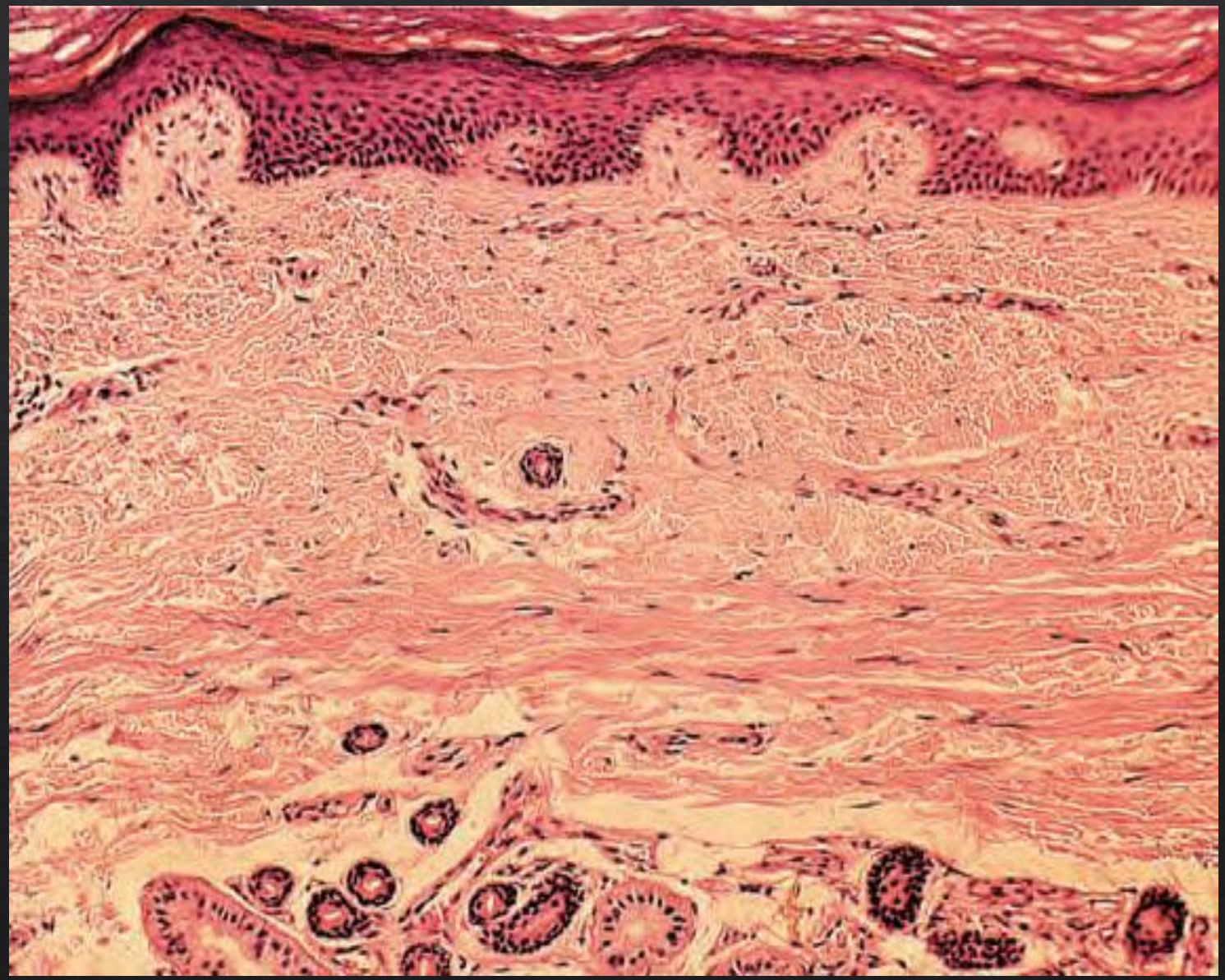
Hard conical projections from the skin, made of compact keratin

Histologically, no atypical cells or loss of polarity of the epidermal cells, but the granular layer may be deficient or absent.

Surgical excision to rule out malignancy.

Post-ionizing radiation keratosis

Accidental exposure to ionizing radiation or after therapeutic radiotherapy



Replacement of collagen by scar and elastotic material, obliterative changes in the vessels & abnormally large and irregular fibroblasts

TREATMENT

Reduction in exposure to ionizing radiation is necessary.

1α,25-dihydroxyvitamin D_3.

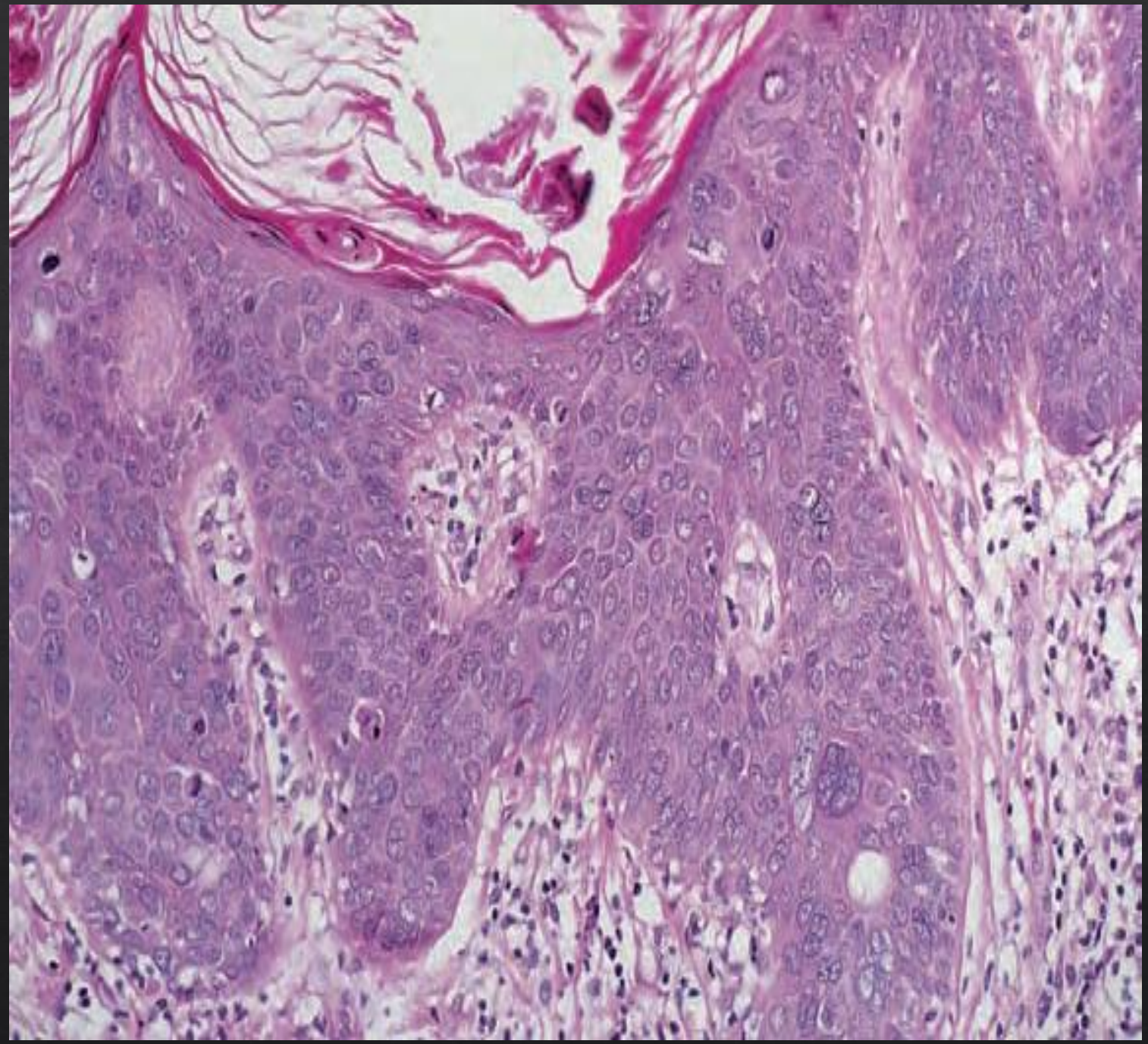
Individual lesions could be treated with cryotherapy.

Bowen disease

Full-thickness epidermal dysplasia.

Pleomorphism ,hyperchromasia & enlargement.

Cells keratinise prematurely.



TREATMENT

High factor broad spectrum sunscreen

Curettage

5% fluorouracil cream

5% imiquimod cream

PDT

Cryotherapy

Excision

MALIGNANT LESIONS

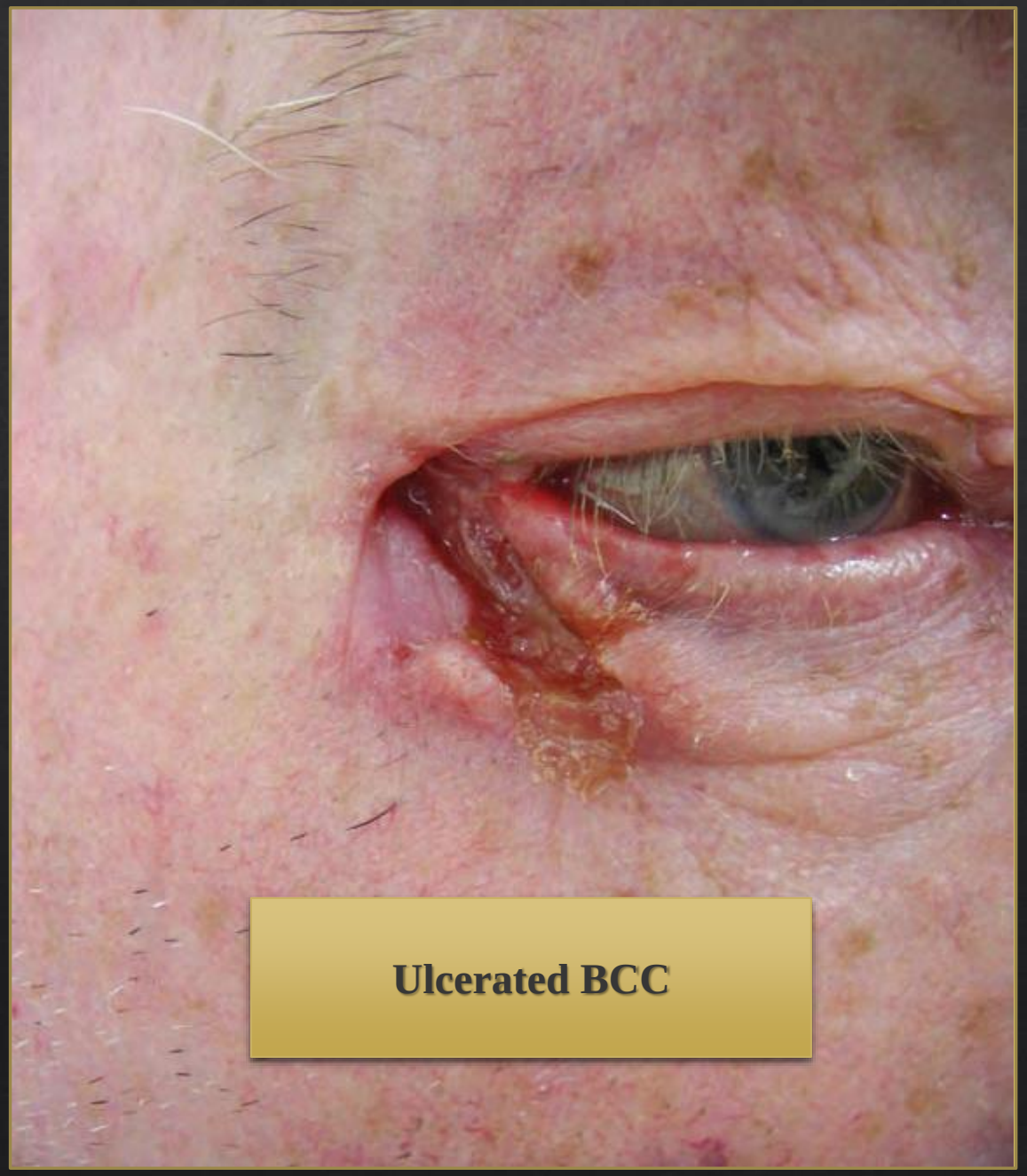
BASAL CELL CARCINOMA

Nodular BCC

Superficial BCC

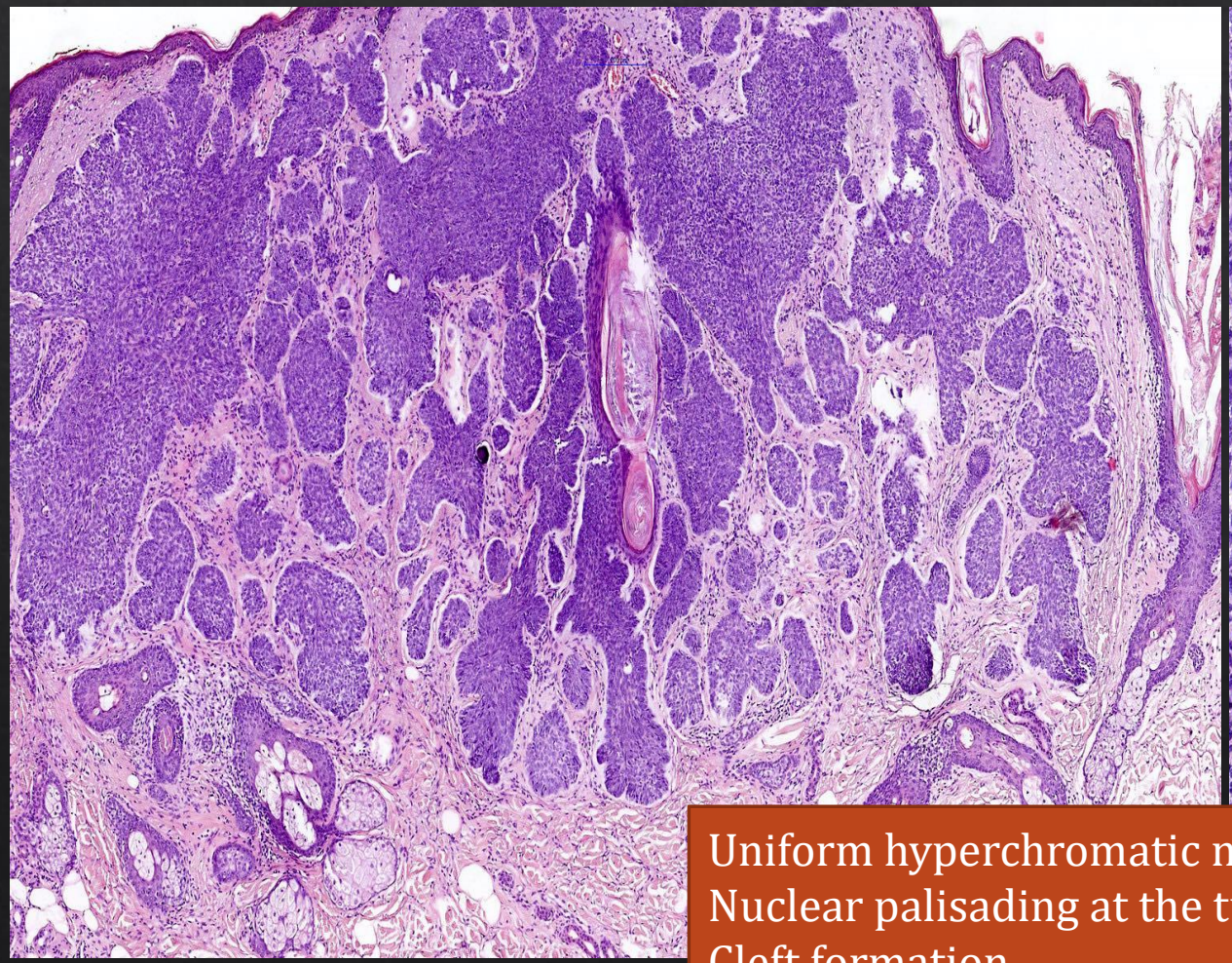
Pigmented BCC.

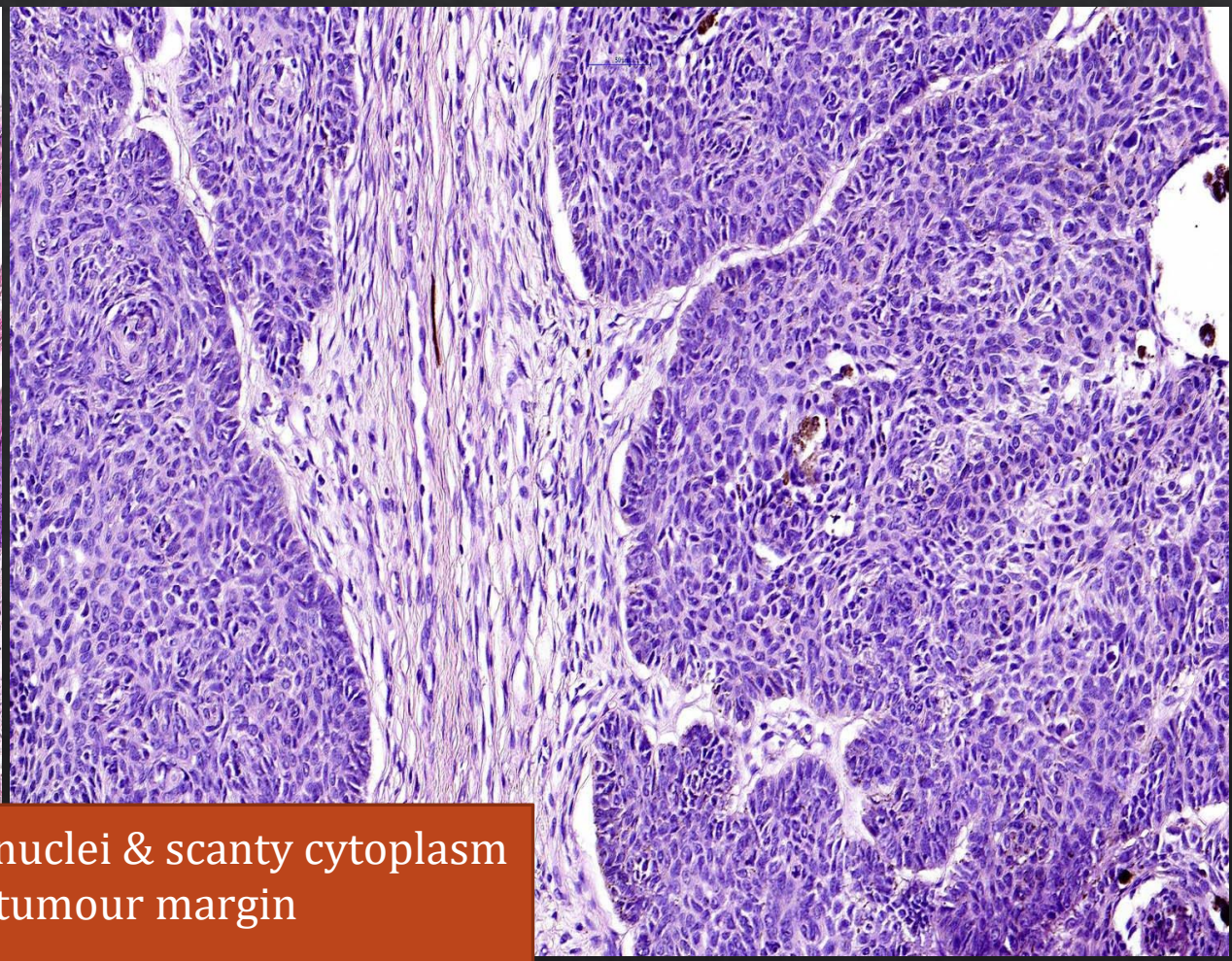
Morphoeic BCC



Ulcerated BCC

HISTOPATHOLOGY (BCC)





Uniform hyperchromatic nuclei & scanty cytoplasm
Nuclear palisading at the tumour margin
Cleft formation
Mucin deposition

Treatment of BCC

- ✓ Topical Imiquimod
- ✓ PDT
- ✓ Curettage & cautery
- ✓ Cryotherapy
- ✓ Radiotherapy Excision
- ✓ Mohs micrographic surgery

SQUAMOUS CELL CARCINOMA

Multiple invasive SCC in a patient with a history of exposure to arsenic.

Raised erythematous invasive squamous cell carcinoma

Well-differentiated squamous cell carcinoma with even circumscribed edge and central crusting.

HISTOPATHOLOGY (SCC)

The cells of SCC vary from large, polygonal cells with vesicular nuclei, prominent nucleoli and an abundant cytoplasm, overt evidence of keratinization and well-developed intercellular bridges (well differentiated
Lesions) to pleomorphic cells which provide no clear cytological evidence of their origin (poorly differentiated lesions).
Histological grading of the differentiation of the tumour is required.

TREATMENT of SCC

High-risk squamous cell carcinomas

surgical excision or MMS

Low-risk squamous cell carcinomas

Curettage and cautery
Cryotherapy
Photodynamic therapy

SECOND LINE:

- ✓ Primary
- ✓ Adjuvant radiotherapy

MELANOMA

Superficial spreading melanoma
Early presentation

Superficial spreading melanoma
late presentation

NODULAR MELANOMA

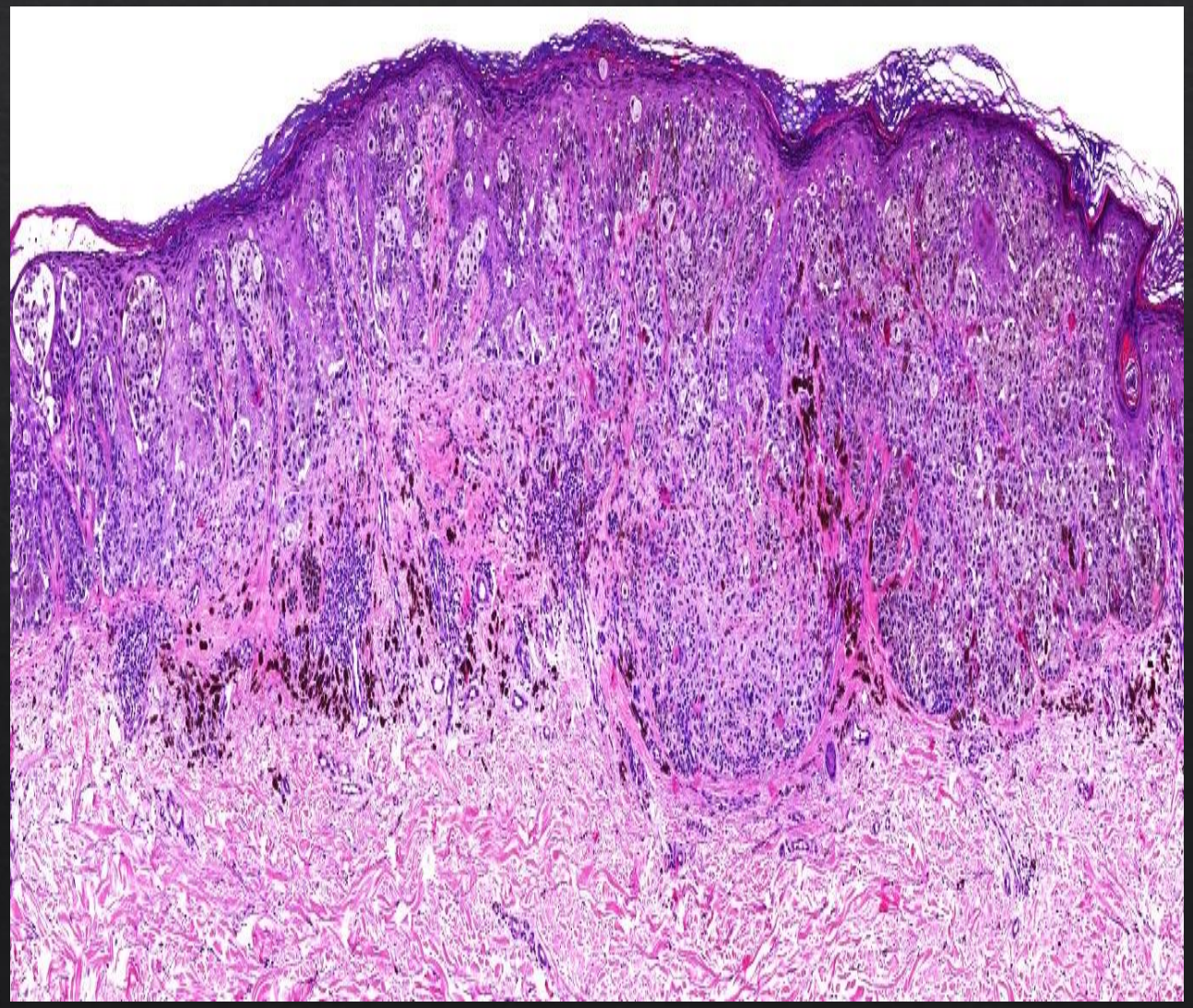
Lentigo maligna melanoma

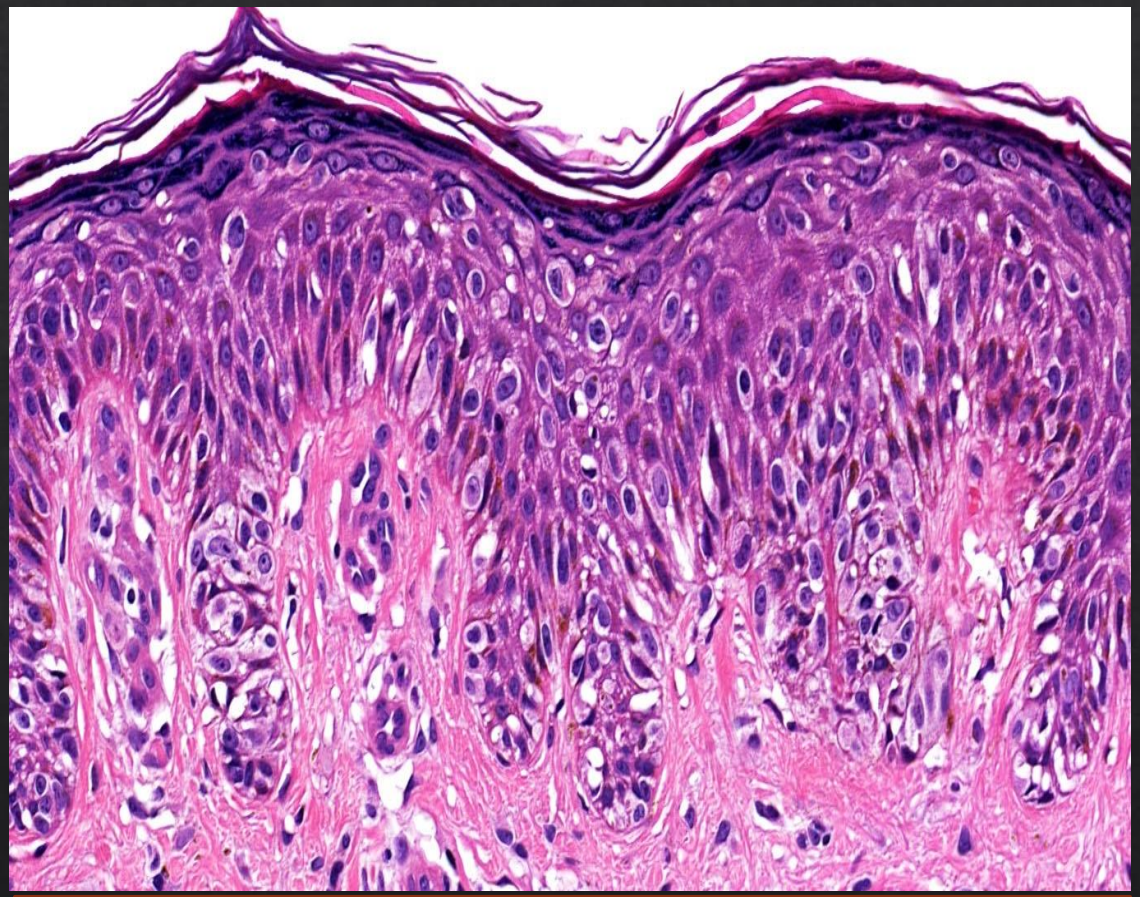
Acral Lentiginous Melanoma

Acral Lentiginous Melanoma

Mucosal Melanoma

HISTOPATHOLOGY (Melanoma)

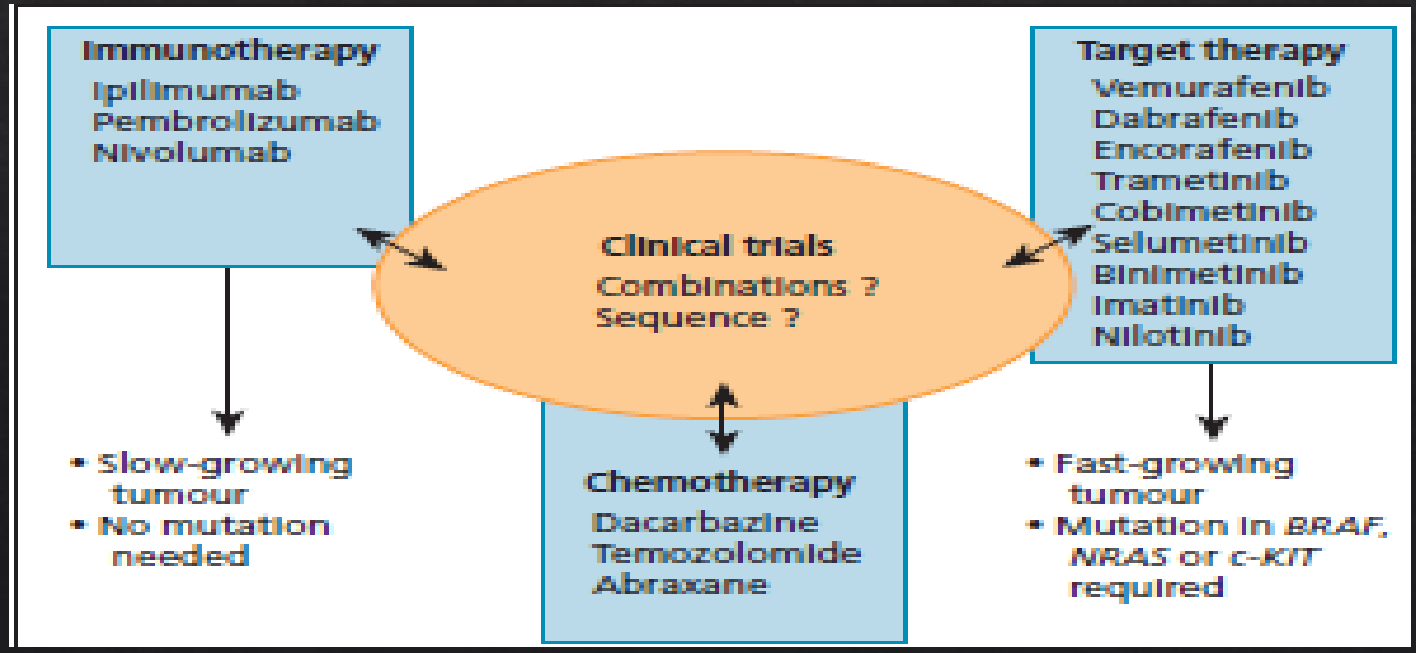




Irregular architecture
Nests of different size and shape
Prominent pagetoid spread.

Treatment of Melanoma

- WLE with appropriate margins and also consideration and completion of SLNB in appropriate patients.
- Lymph node dissection
- Systemic therapy



THANK YOU !!