

**SKIN – INTEGUMENT
(INTEGUMENTUM COMMUNE,
CUTIS)**

AREA: 1.6 – 2.2 m²

THICKNESS: 1.5 – 4 mm



Head and neck = 9%

Upper limbs = 18%

Trunk = 36%

Lower limbs = 36%

Genitoanal region = 1%

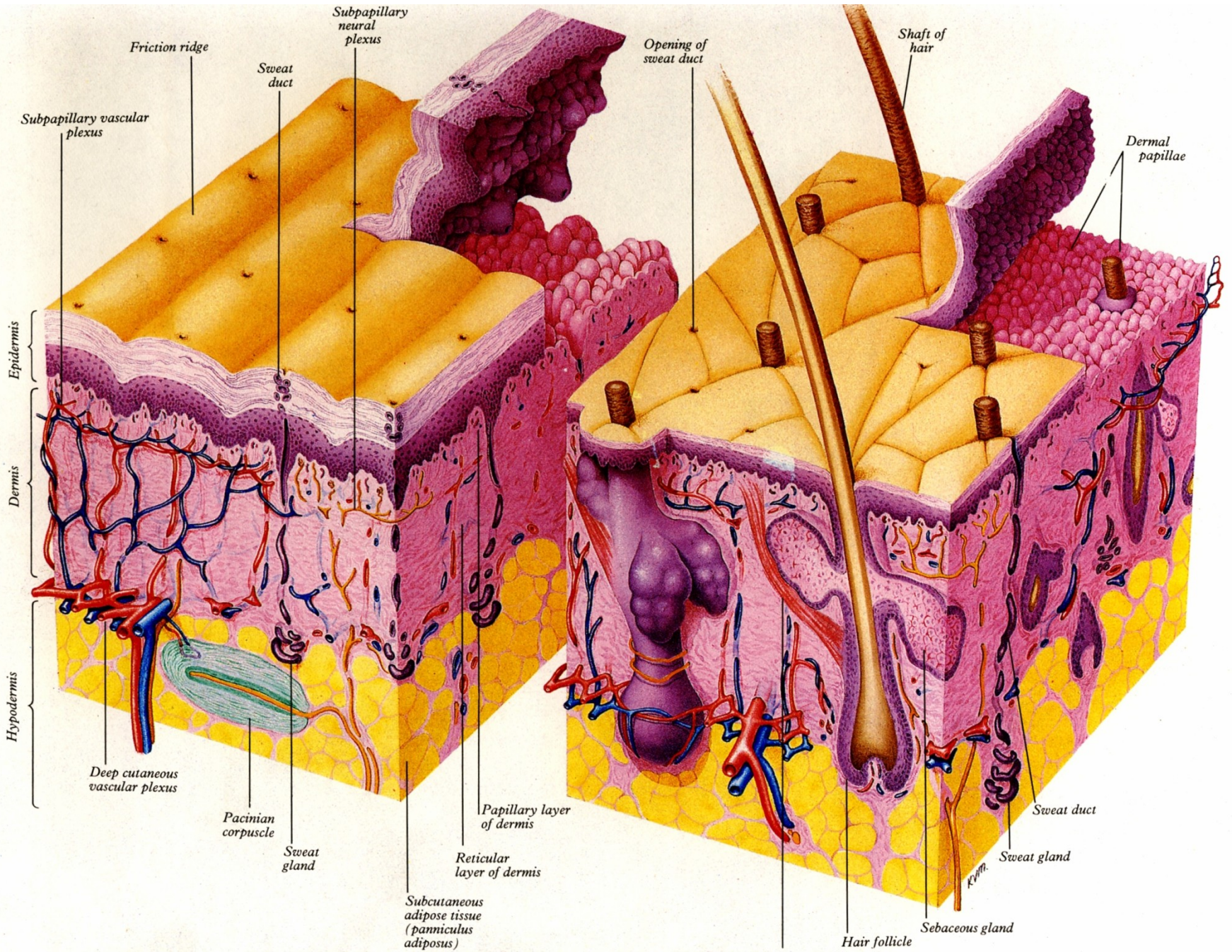


**Barrier against damage,
thermoregulation, sensory function,**

biochemical functions, vitamin D, emotional states, state of health, age, pathological states (cyanosis, rash)

hairless (glabrous)

hairy (hirsute)



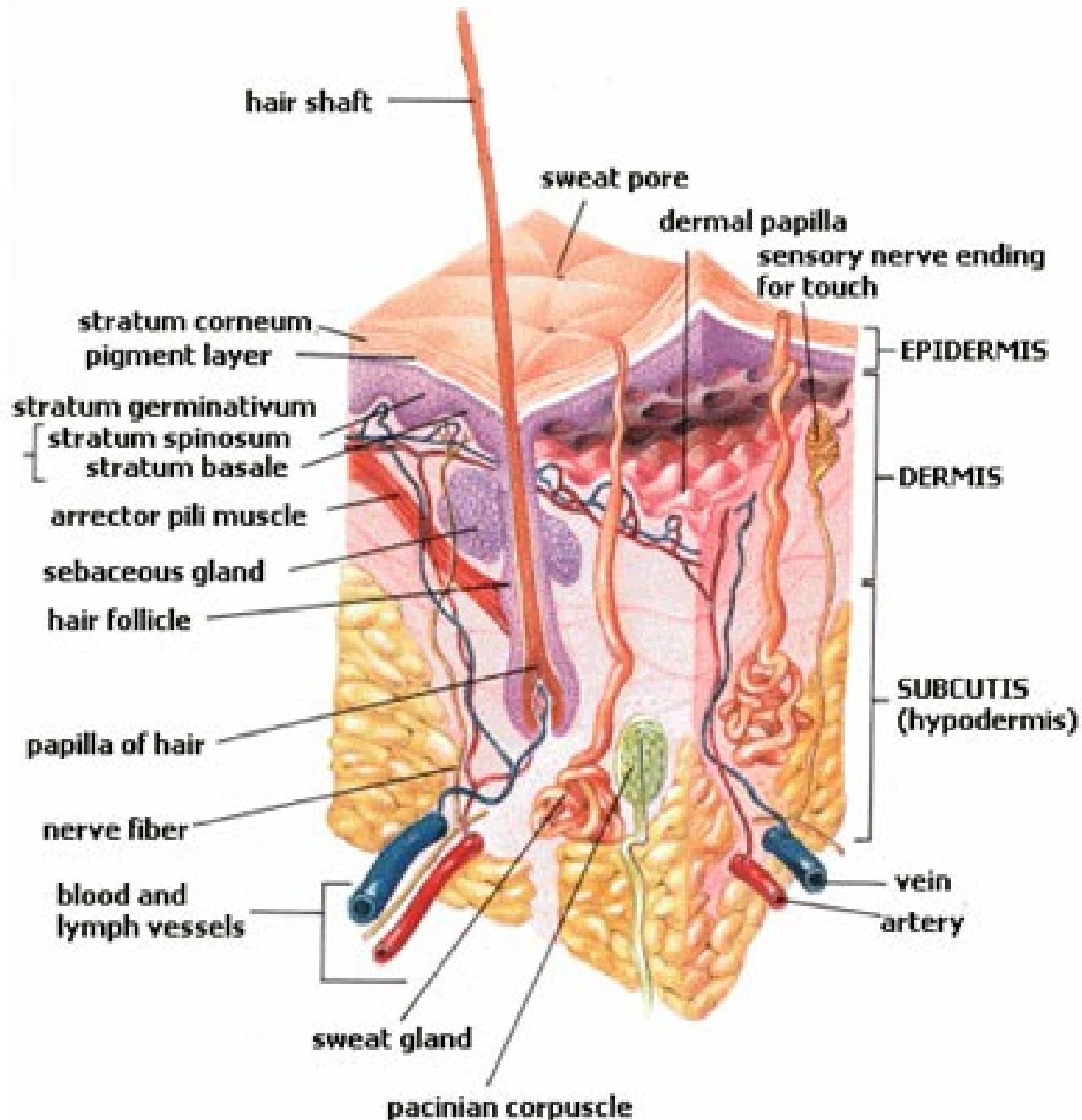
EPIDERMIS (0.03 – 0.1 mm)

Str. basale
Str. spinosum
Str. granulosum

Str. lucidum
Str. corneum

Keratinocytes
Keratin

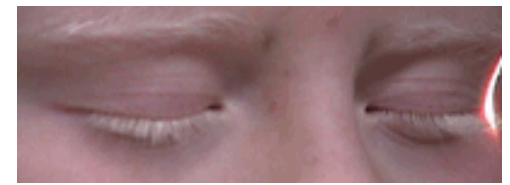
4 weeks



Melanocytes - melanosomes - melanin
Melanocyte stimulating hormone



Albinism



Melanocytic naevi (moles)



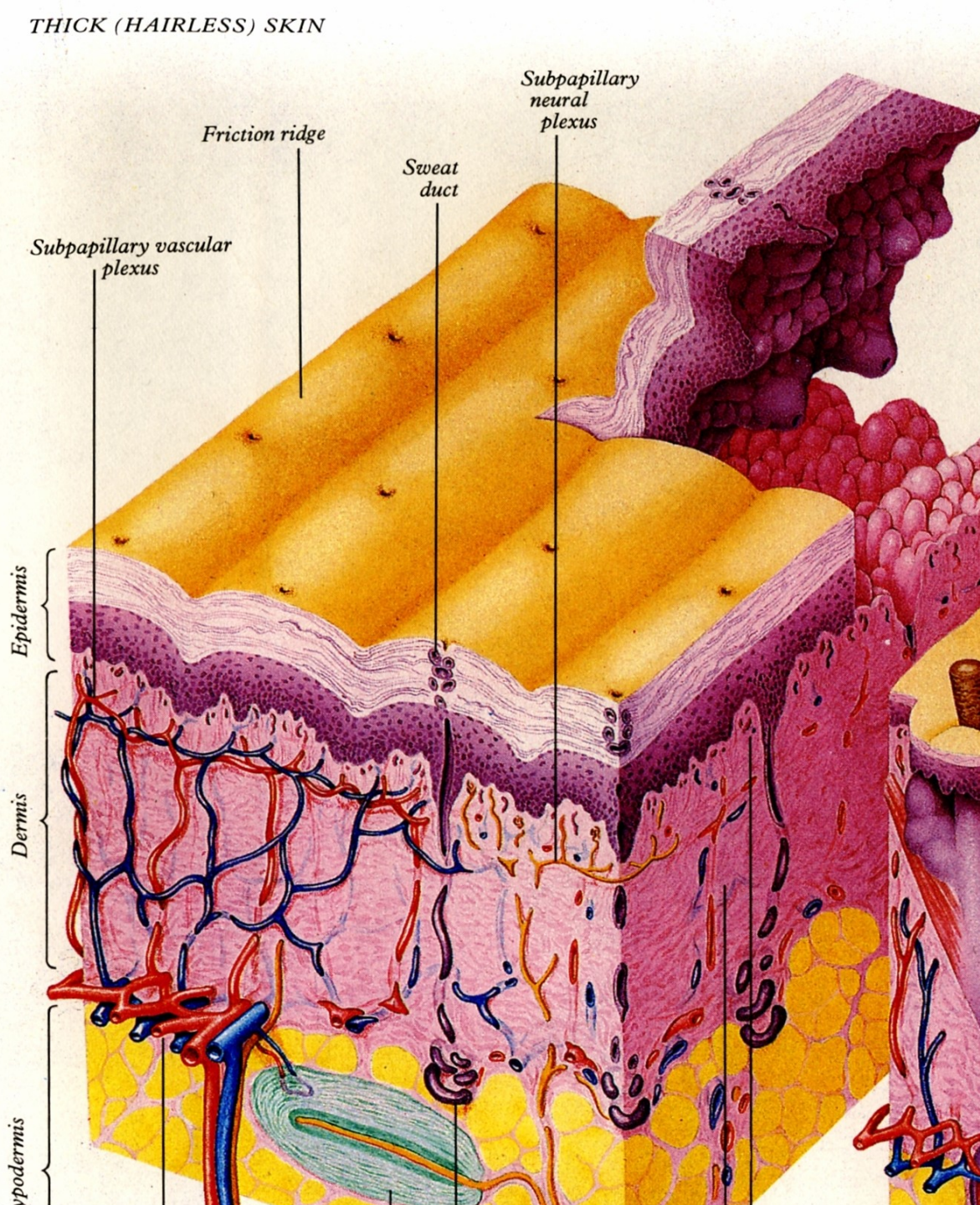
Melanoma



7-dehydrocholesterole → vitaminD3 (cholecalciferole)

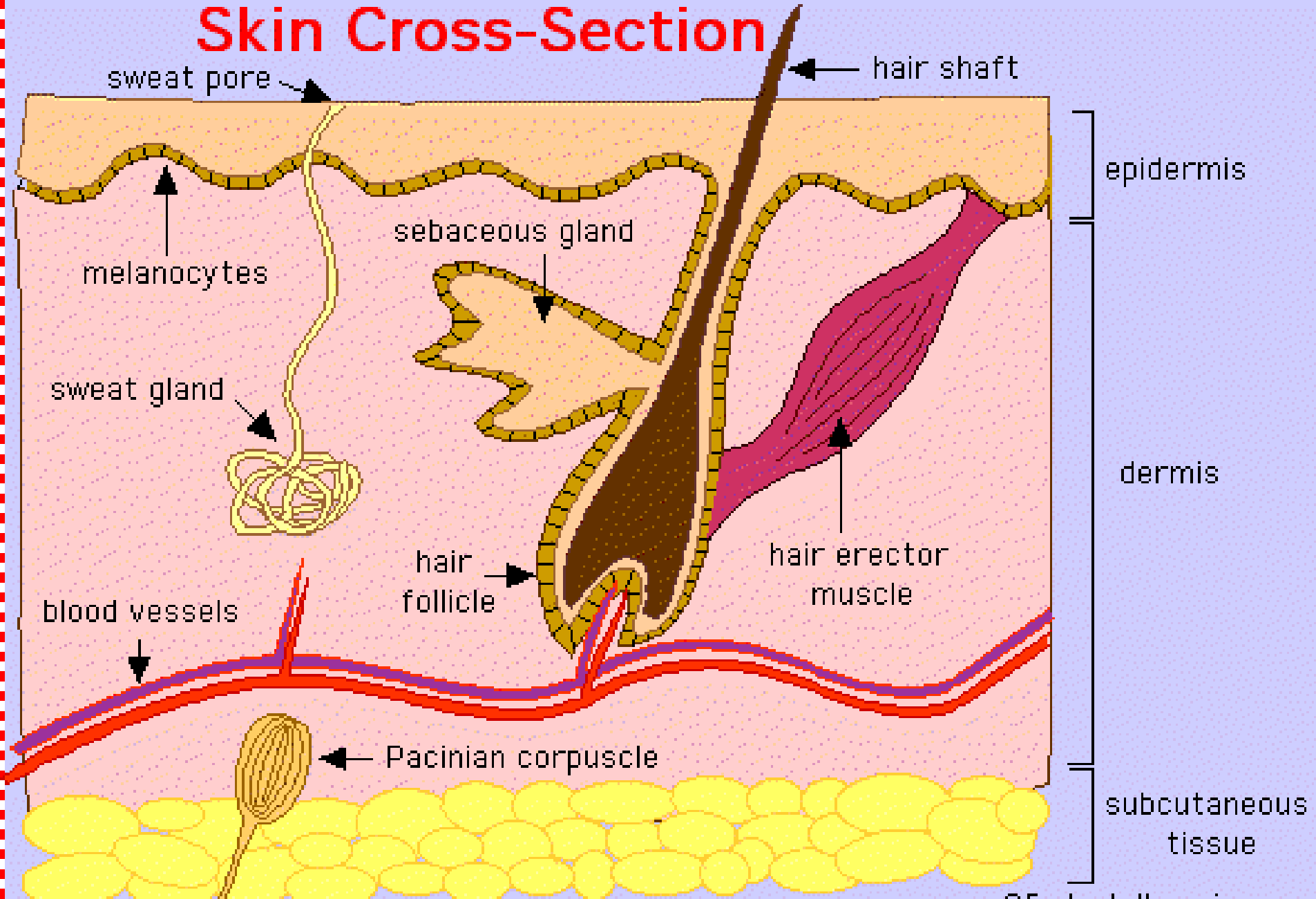
DERMIS (CORIUM) (0.5 – 3 mm)

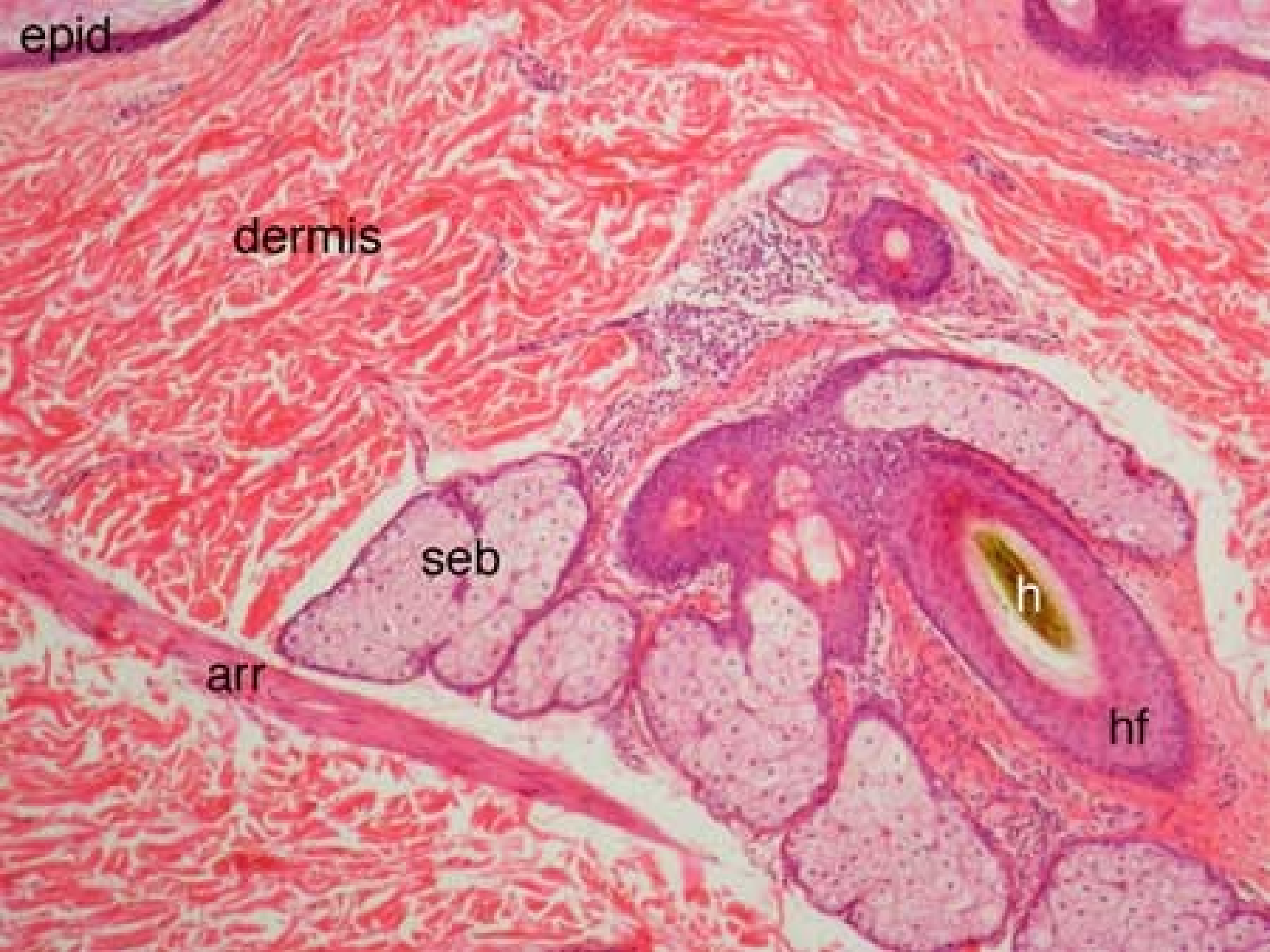
stratum reticulare
stratum papillare



Mm. arrectores pilorum

Skin Cross-Section





epid.

dermis

seb

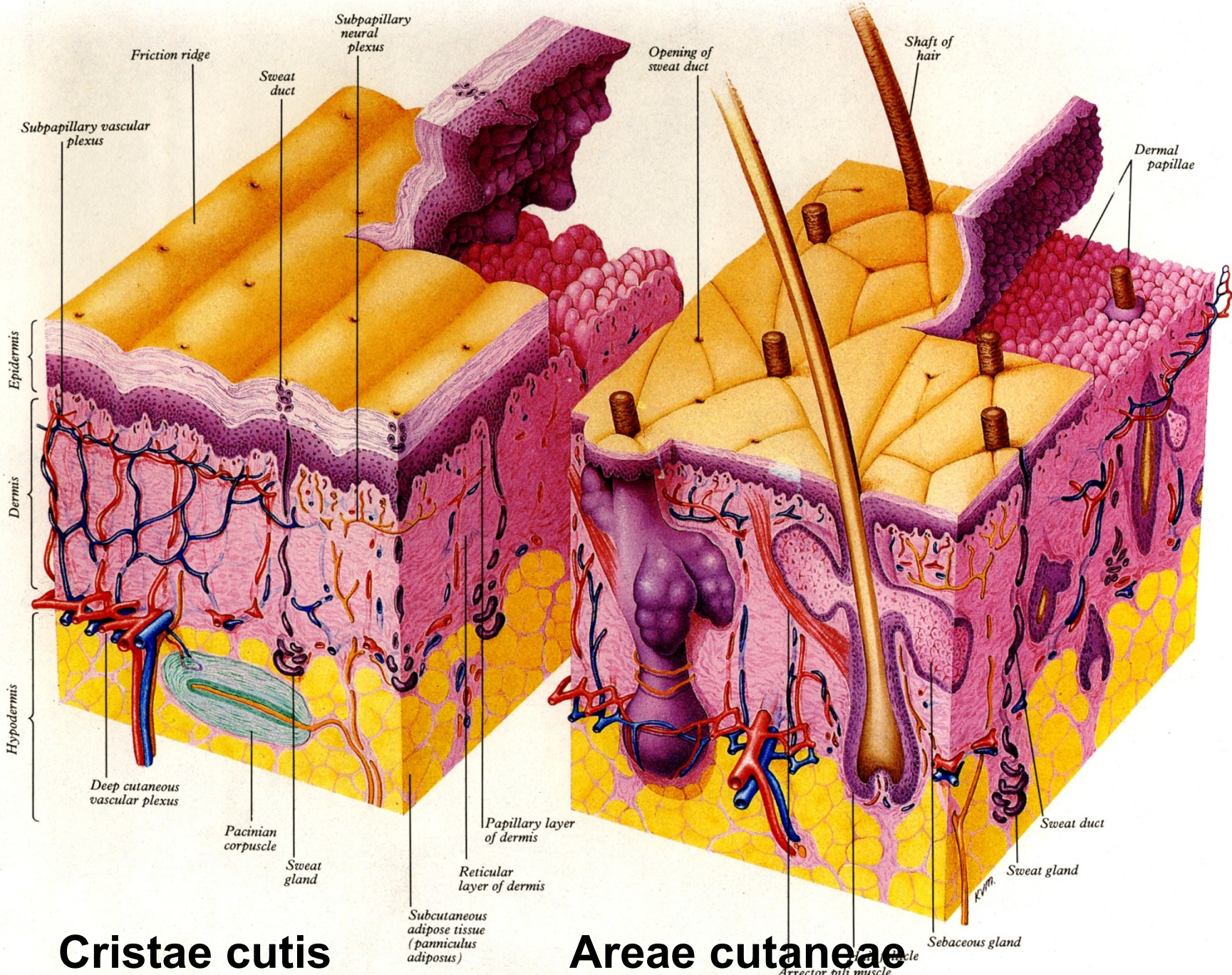
arr

h

hf

THICK (HAIRLESS) SKIN

THIN (HAIRY) SKIN



Cristae cutis

Areae cutaneae

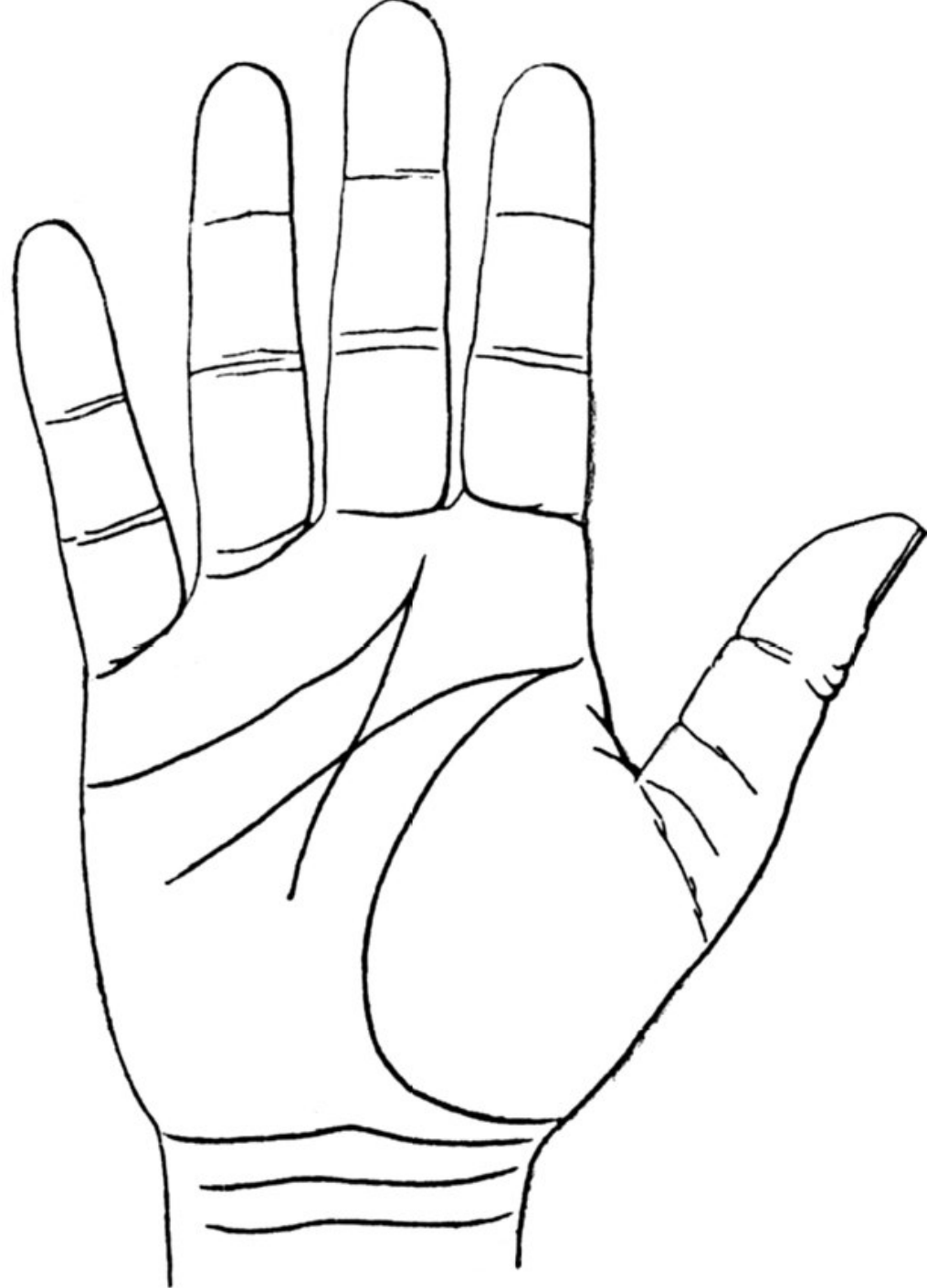
Lineae flexionis:

Linea oppositionis pollicis

Linea manus clausae

**Linea oclusionis digitorum
trium ulnarium**

Linea axialis manus



Linea rasceta - MCJ

Linea restricta

PAPILLARY RIDGES

Whorl

Loop

Arch



1.89 Photographs of the palmar aspect of a terminal phalanx in three different individuals to show the major types of pattern of the fingerprint

ridges. The pattern in A is commonly termed a whorl; B is composed of loops; C is composed of arches. Note interphalangeal flexure lines.

Cristae cutis

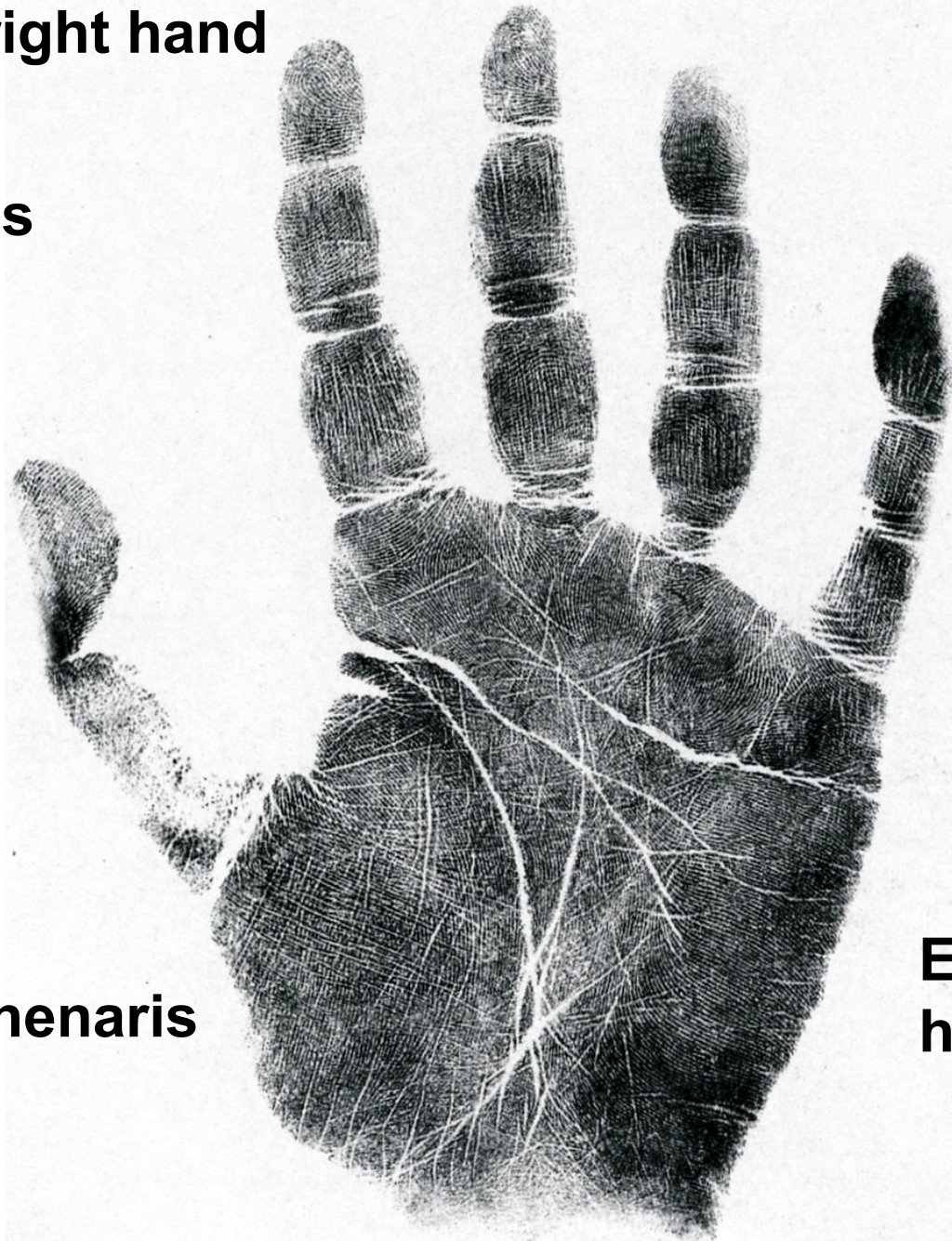
Sulci cutis

Pori sudoriferi

Toruli tactiles

Imprint of a right hand

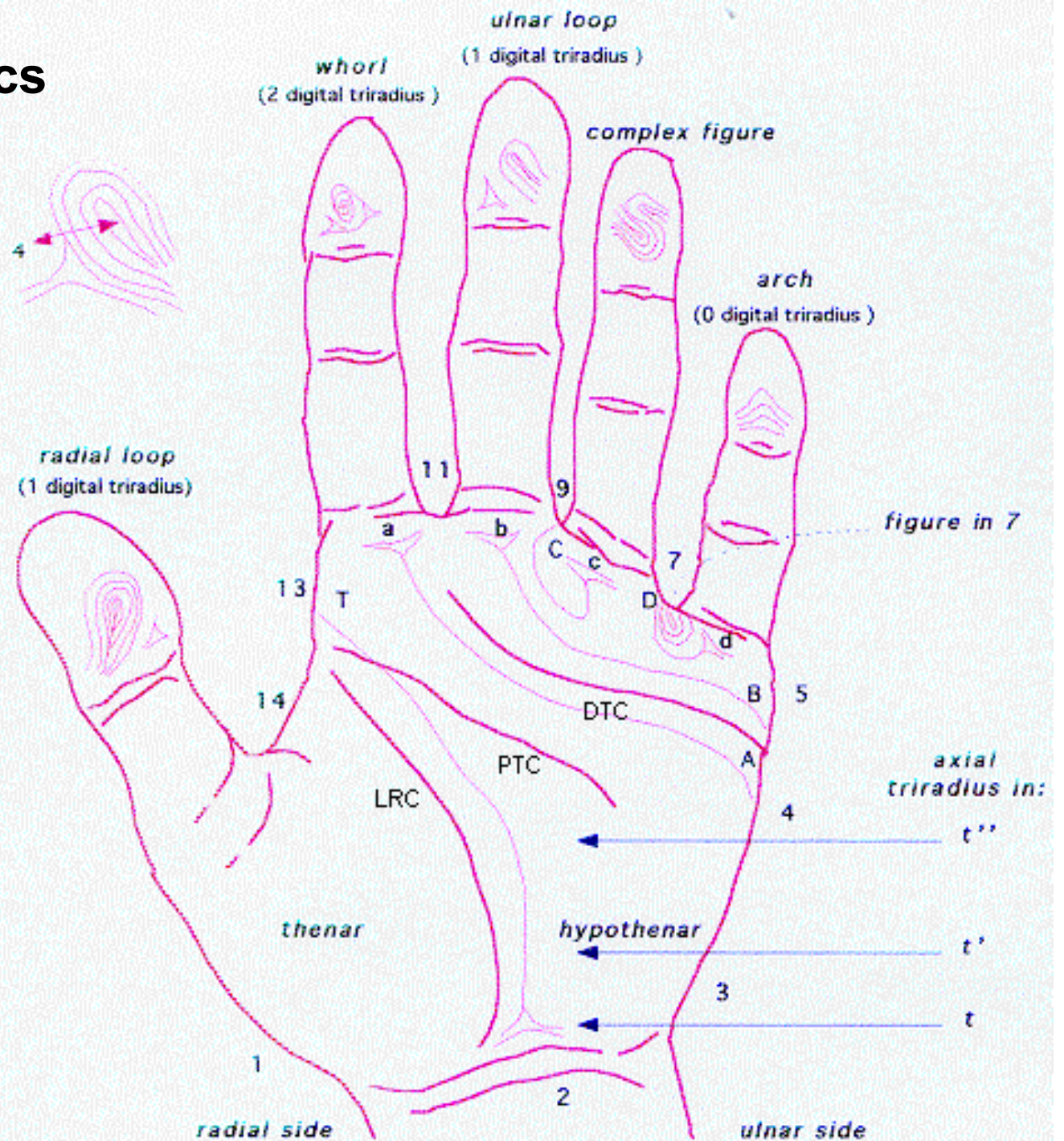
Toruli tactiles



Eminentia thenaris

**Eminentia
hypothenaris**

Dermatoglyphics

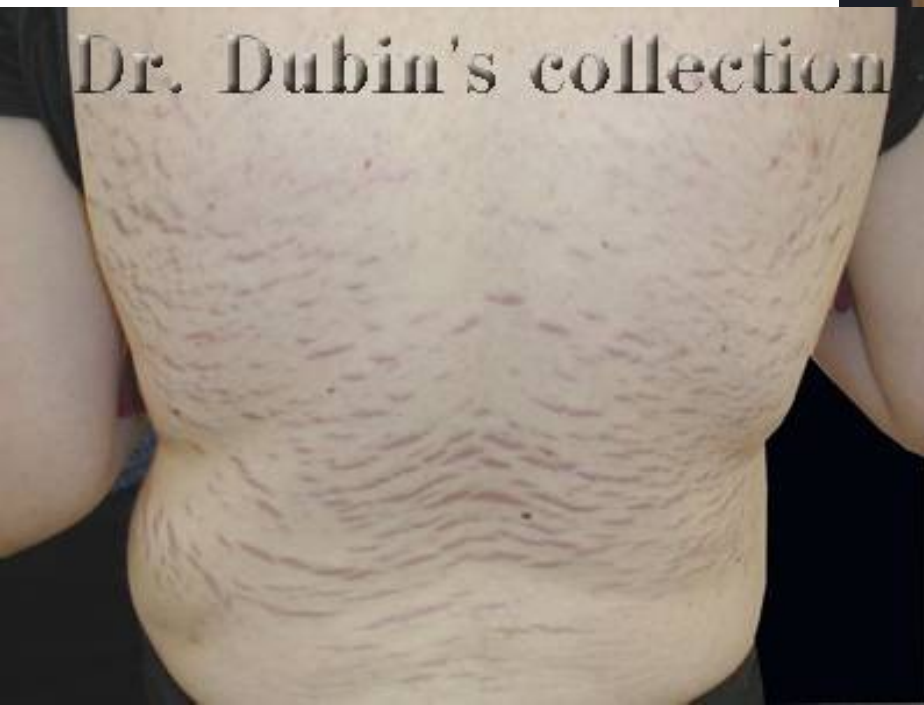


Striae distensae
- striae gravidarum

Dr. Dubin's collection

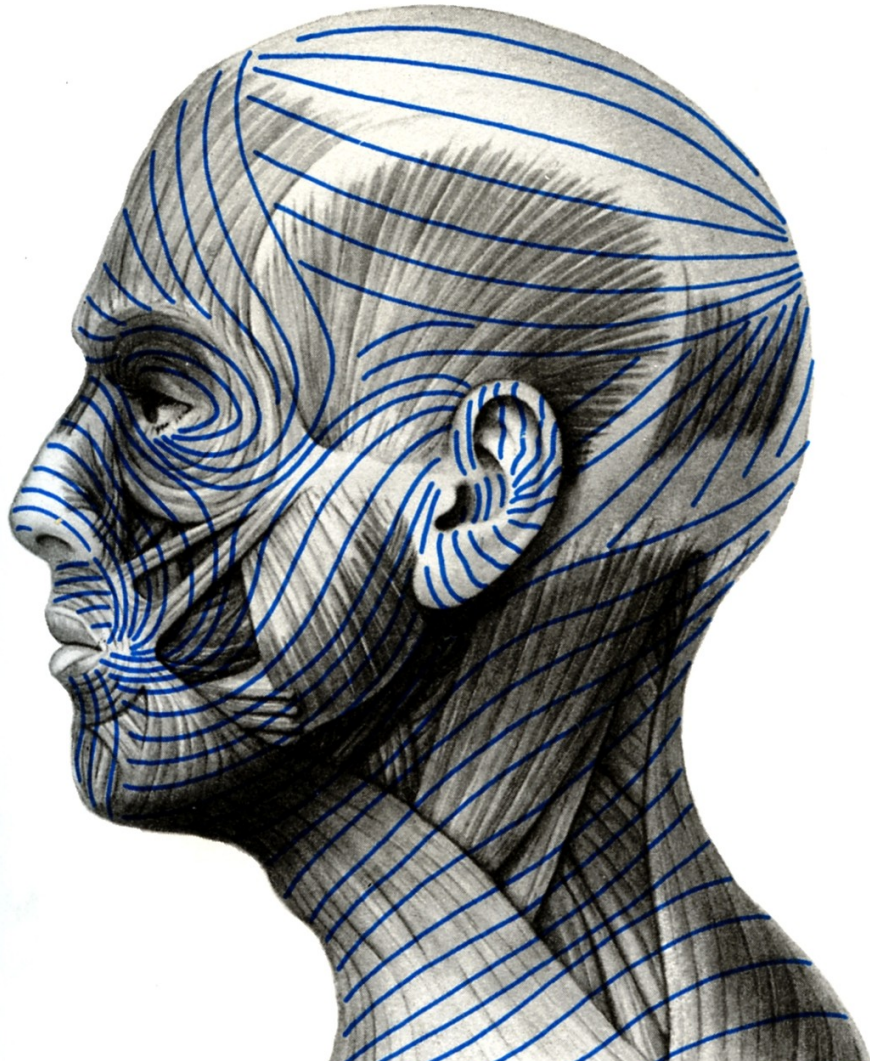


Dr. Dubin's collection

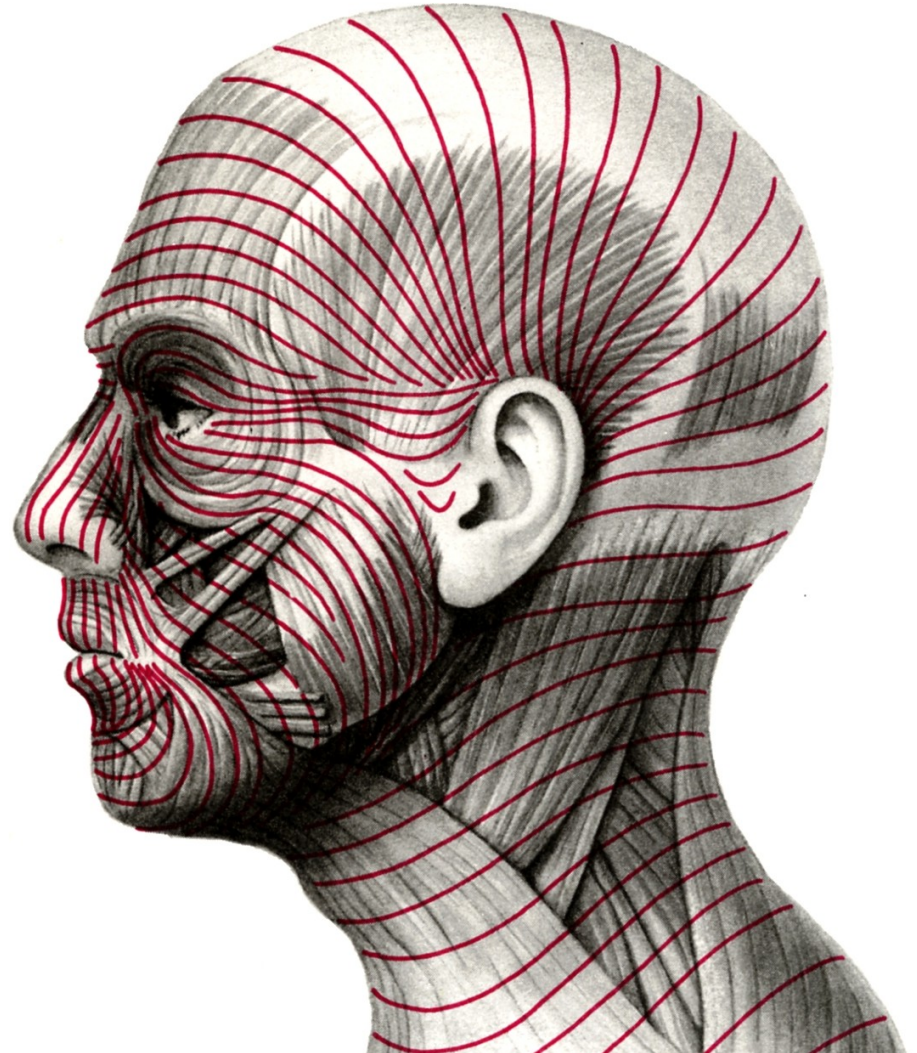


Cleavage lines

Langer's lines



Kraissl's lines



TELA SUBCUTANEA (HYPODERMIS)

Retinacula cutis

Bursae synoviales subcutaneae

Panniculus adiposus

BLOOD VESSELS

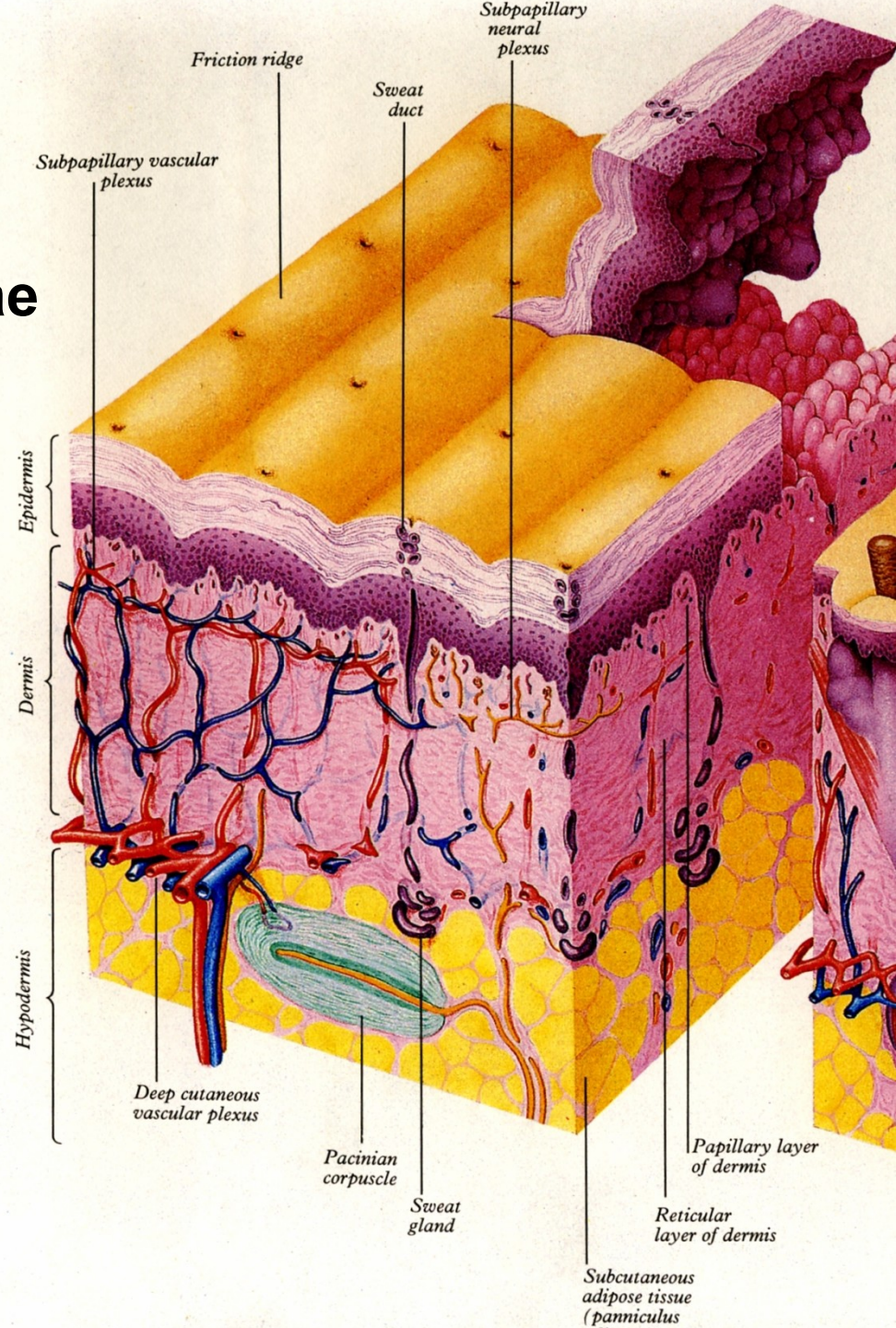
Plexus reticularis

Plexus subpapillaris

LYMPH VESSELS

Rete cutaneum spf.

Rete cutaneum prof.



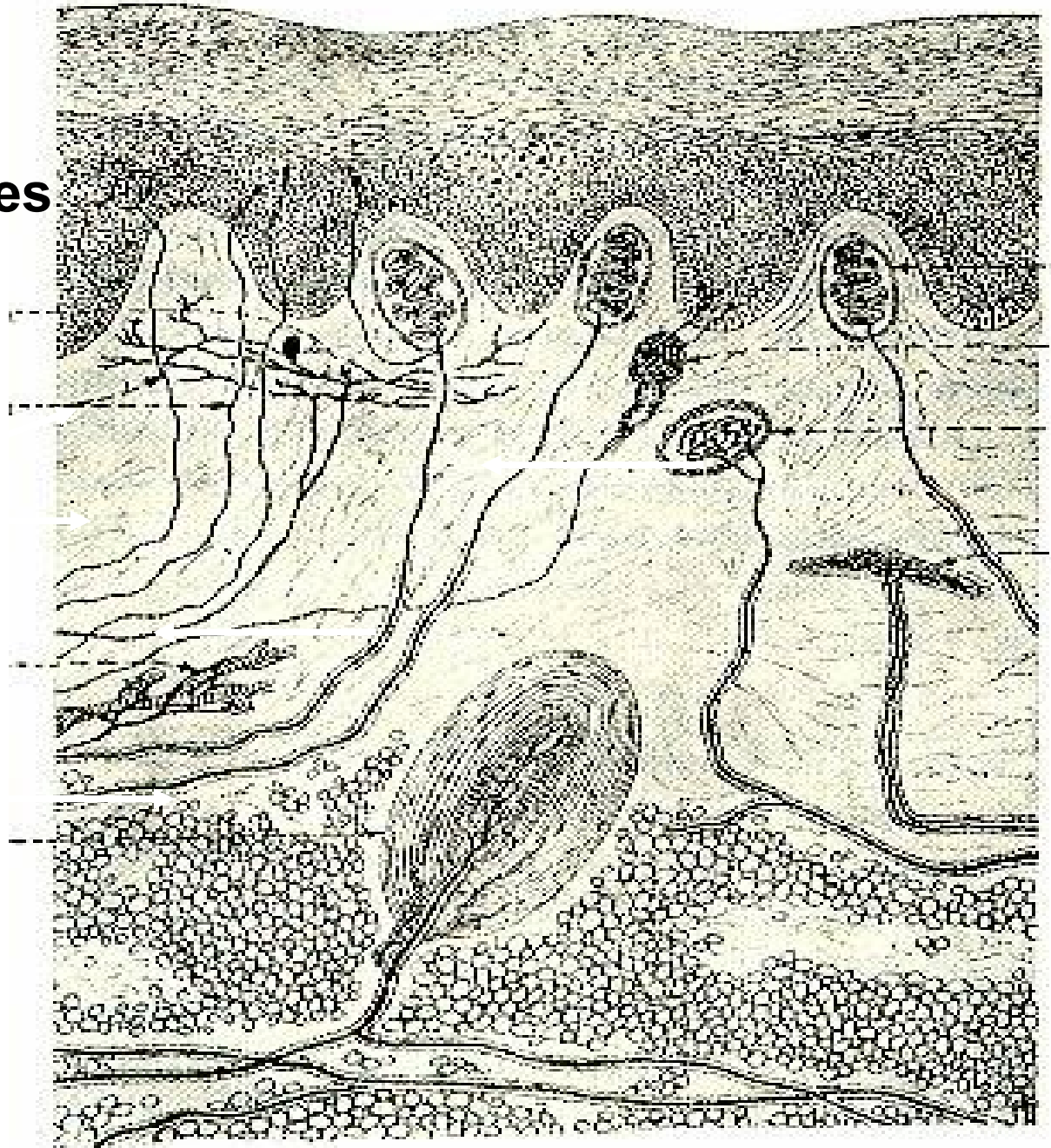
NERVES

Free nerve endings

Meissner's corpuscles

Pacinian corpuscles

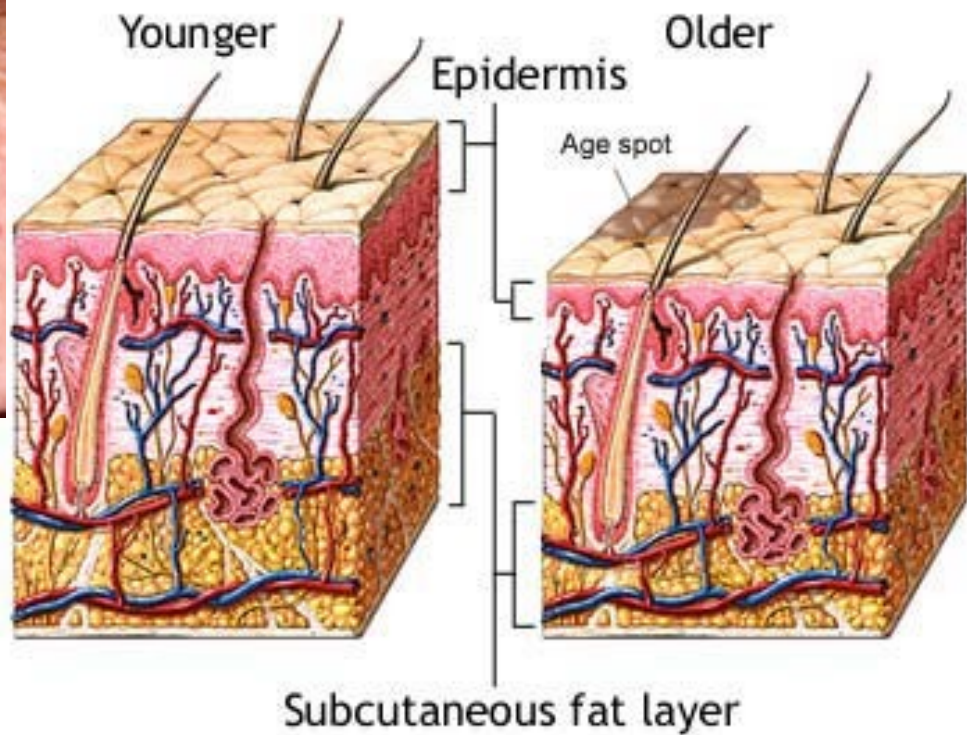
Merkel endings



SKIN AGING



Aging spots



PILUS

60 – 600/cm²

Scapus pili

Radix pili

Folliculus pili

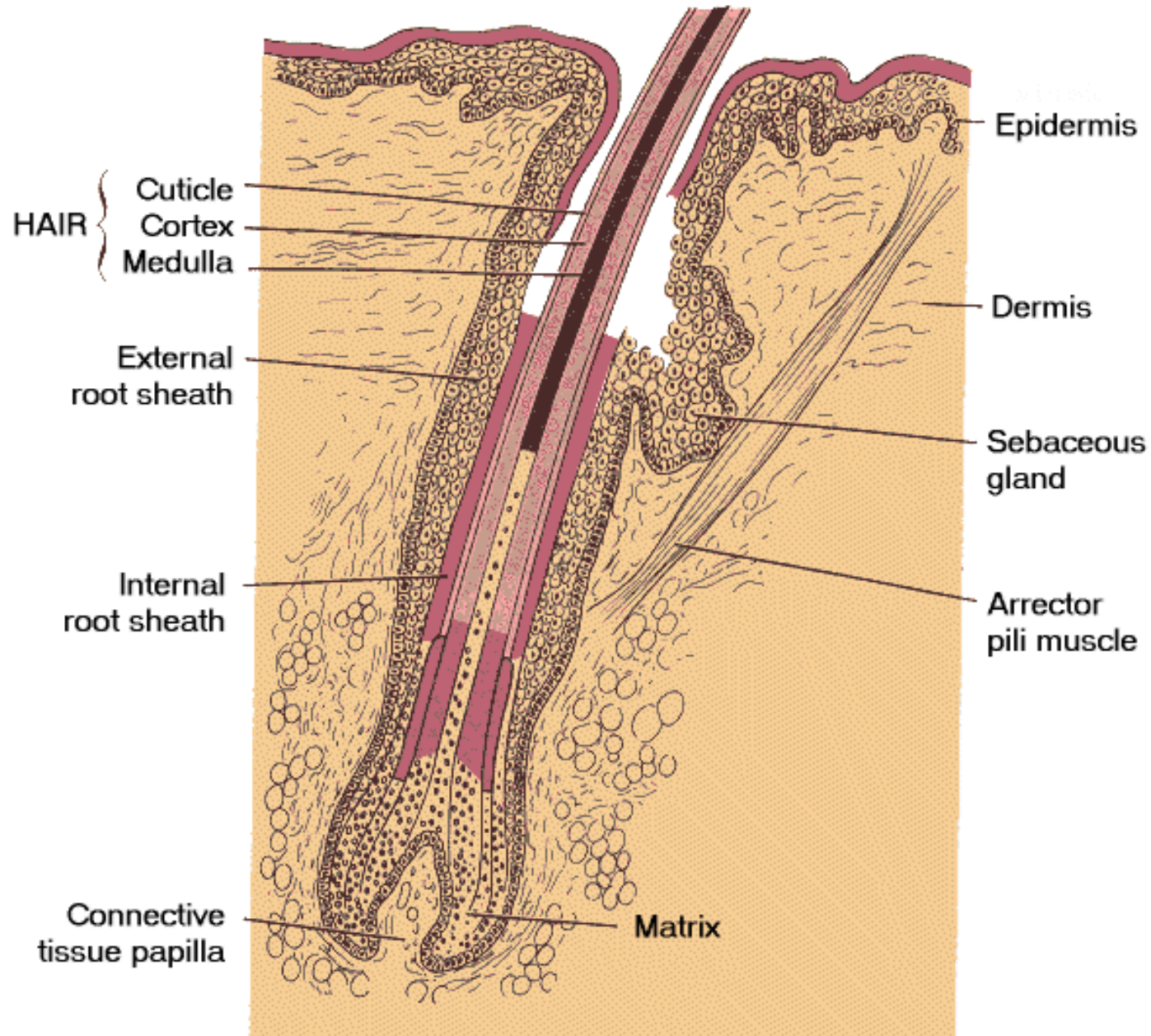
Bulbus pili

Papilla pili

Medulla pili

Cortex pili

Cuticula pili



GROWTH OF THE HAIR

1.5 – 2.2 mm a week

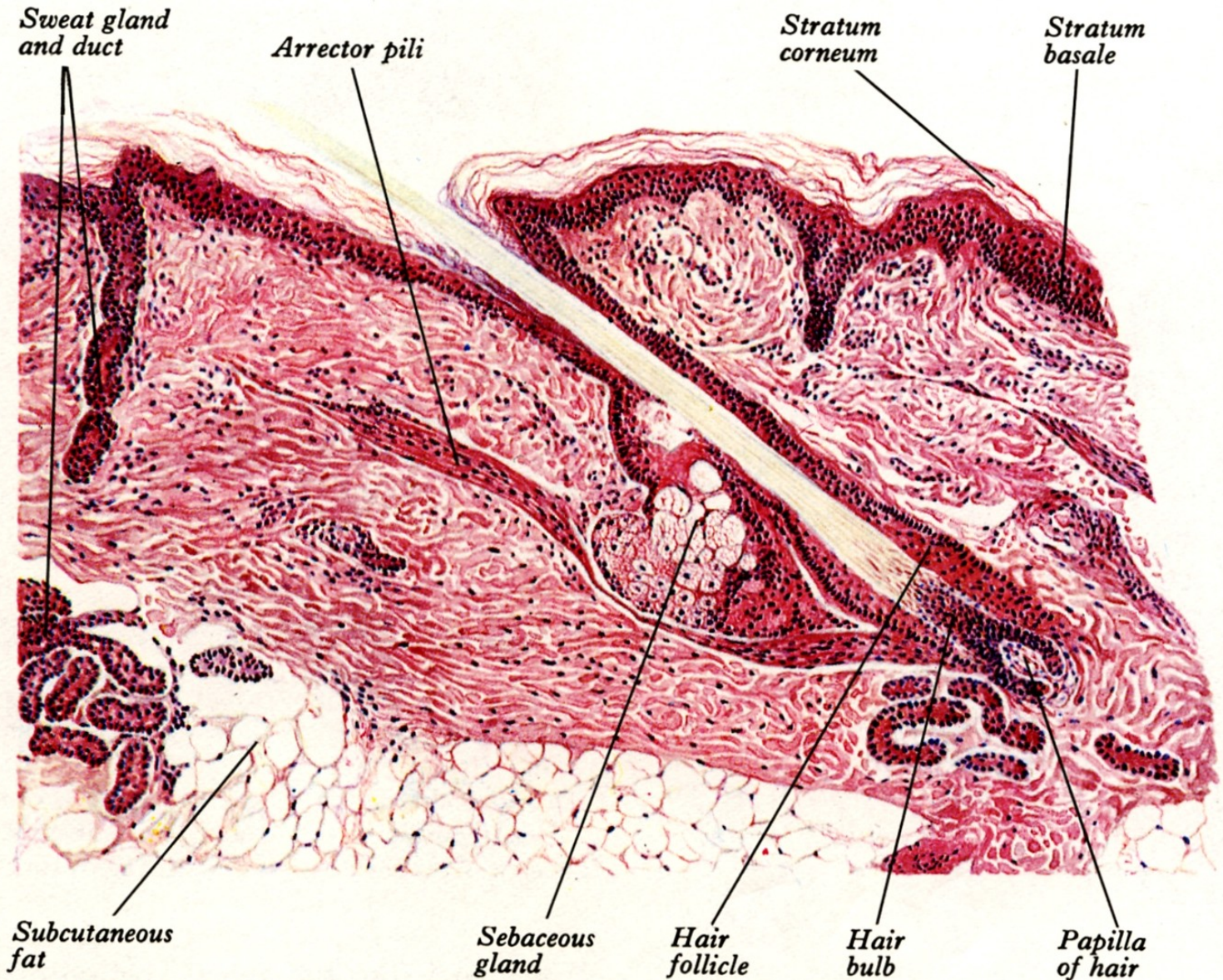
Anagen

Catagen

Telogen

Alopecia

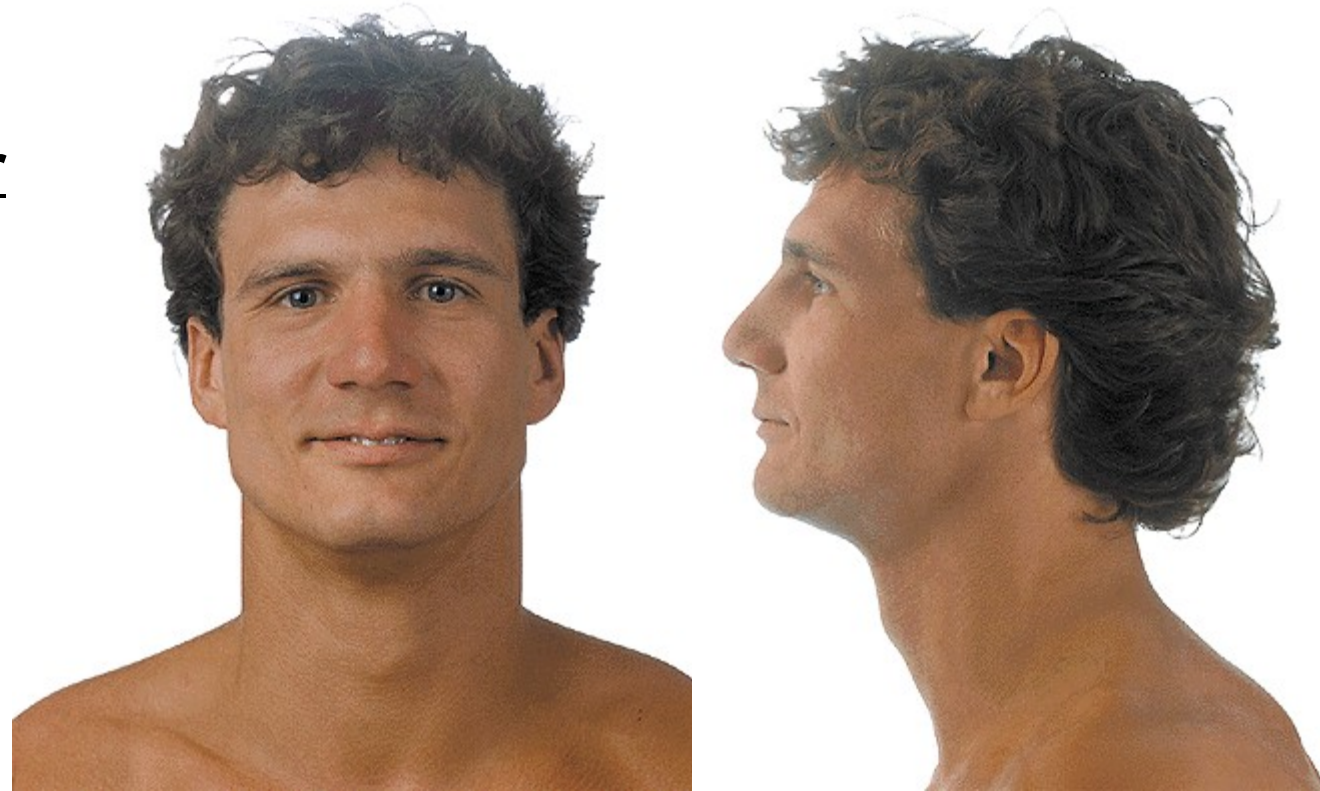
M. arrector pili - piloerection



Primary hair – lanugo
Flumina pilorum
Vortices pilorum
Hypertrichosis lanuginosa



Secondary hair
Pili
Capilli
Cilia
Supercilium



Tertiary hair

Hirci

Pubes

Barbae

Tragi

Vibrisae

Sinus hairs

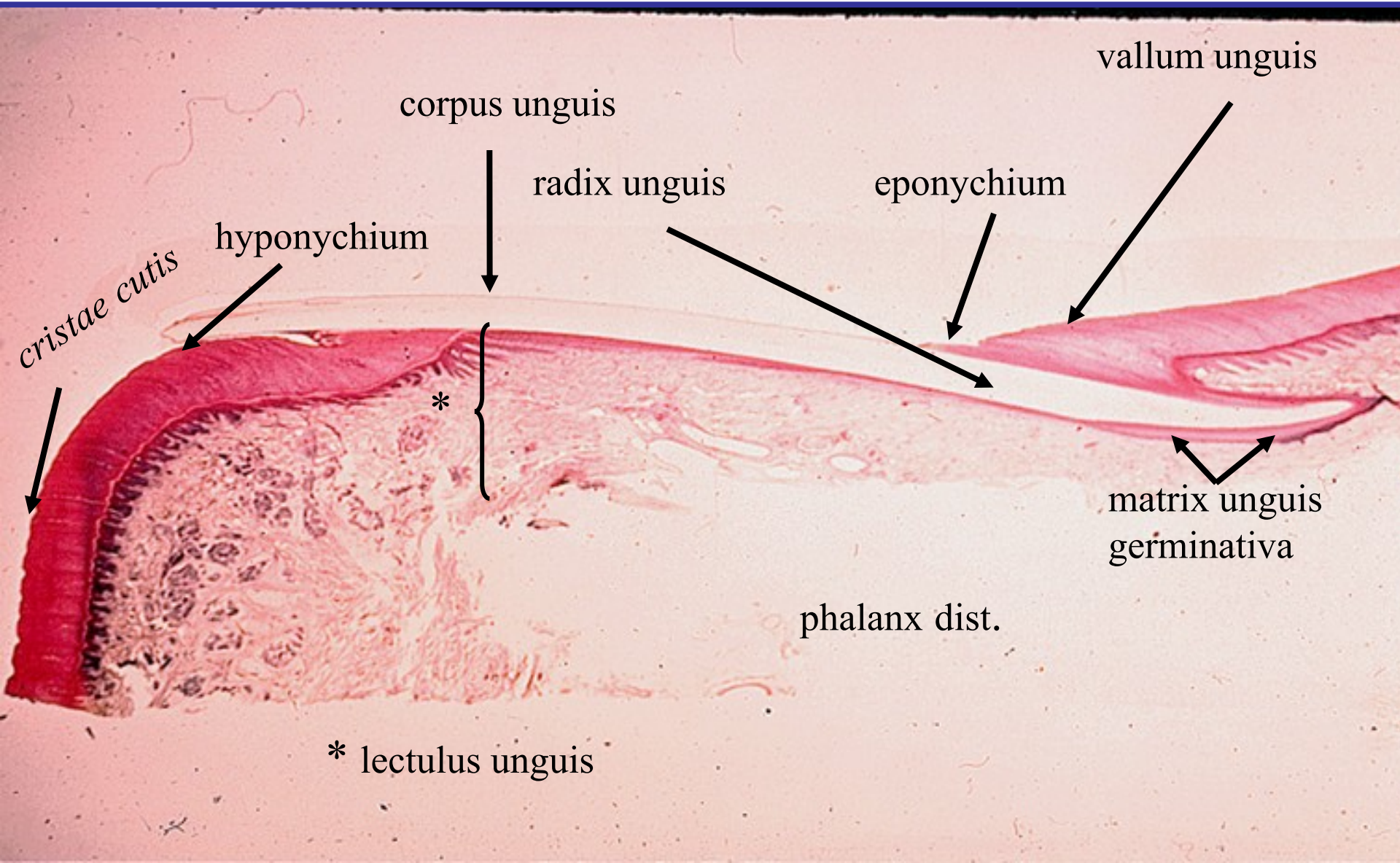


Hypertrichosis vera

UNGUIS (ONYX)

0.5 – 1 mm

lunula unguis



GLANDULAE SEBACEAE

Sebum

Meibomian glands

Holocrine type of gland

Comedo – acne

GLANDULAE SUDORIFERAE

Eccrine – sudor - pH 5.5 – 6

Apocrine glands – scent glands

- gll. s. axillares
- gll. circumanales
- gll. ceruminosae – cerumen
- gll. s. nasales
- gll. ciliares (Moll)
- gll. areolares
- gl. mammae

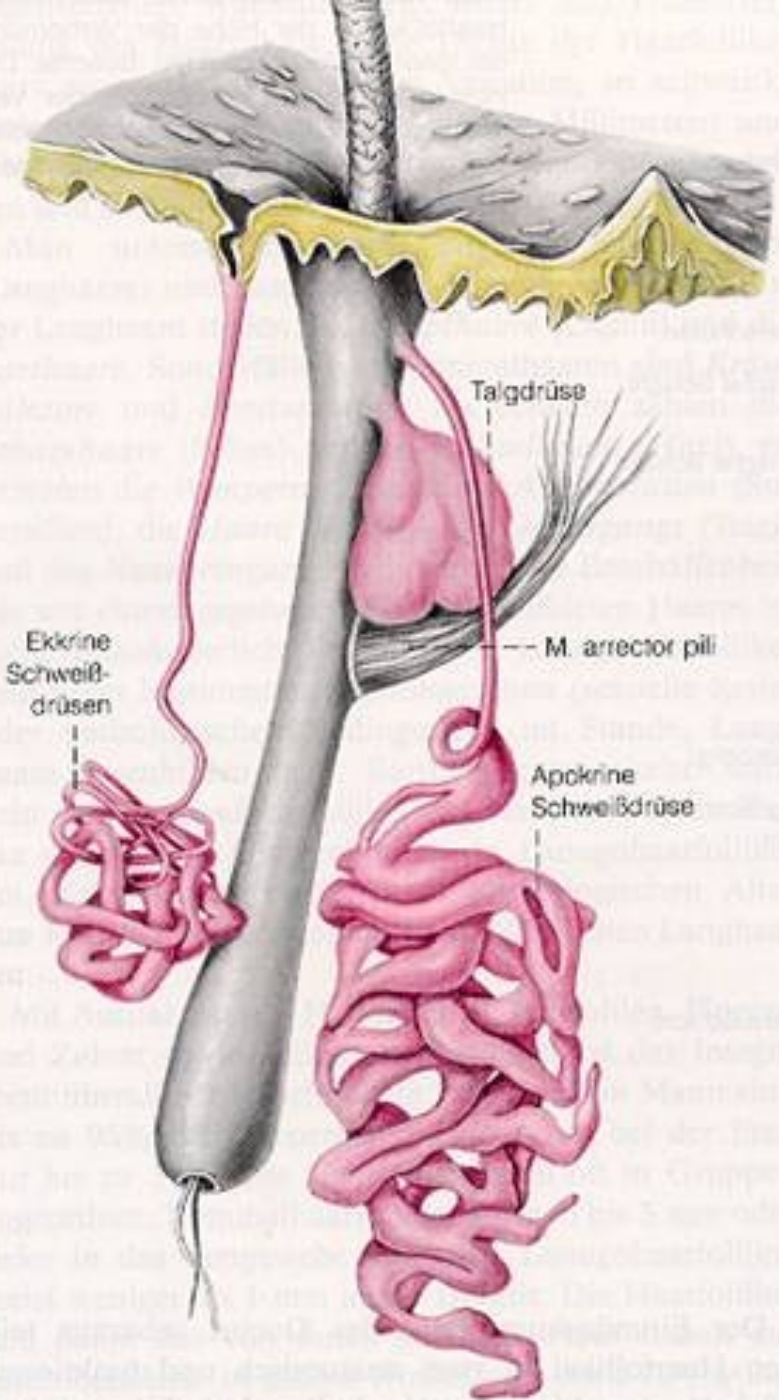


Abb. 16 28-18. Anhangsgebilde der Haut und ihre Beziehungen

MAMMA

sinus mammarum



MAMMA FEMININA

Areola mammae

**Glandulae areolares
(Montgomery)**

Papilla mammae

Area cribriformis papillae



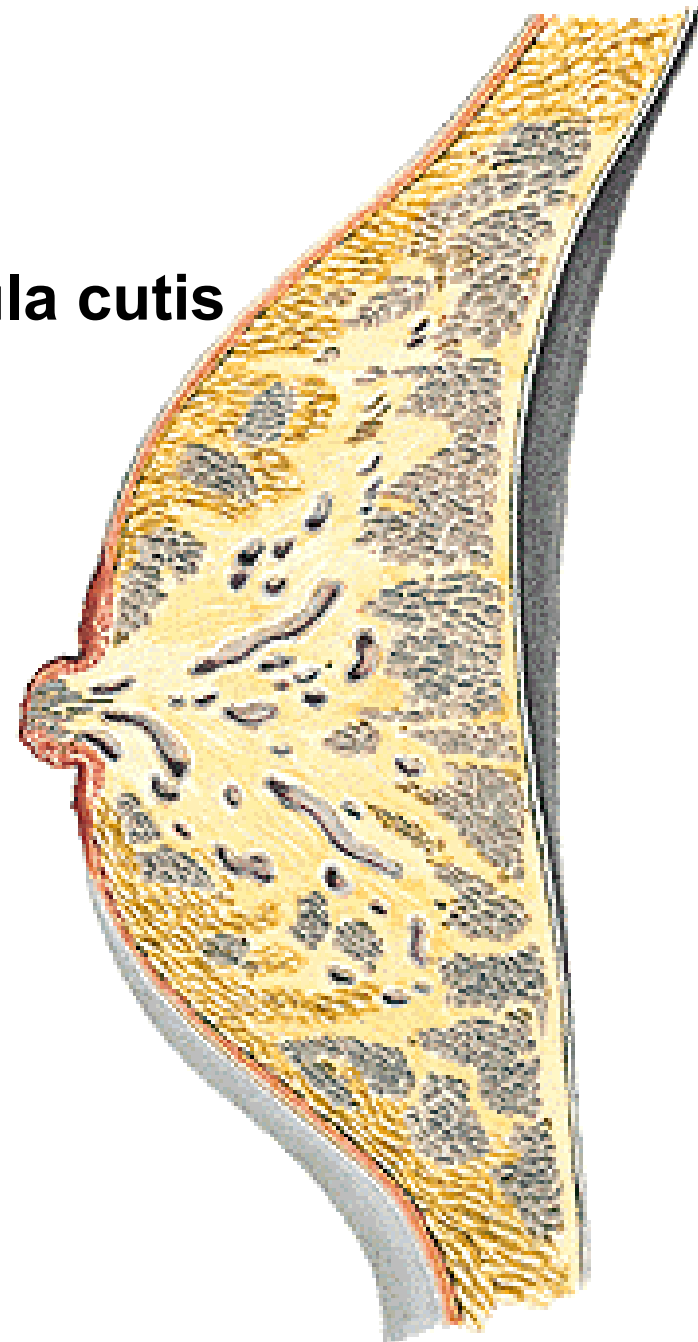
Ductus lactiferi

Fascia pectoralis spf.

Tela adiposa premammaria

Tela adiposa retromammaria

Lig. suspensorium Cooperi – retinacula cutis



GLANDULA MAMMARIA

Processus axillaris

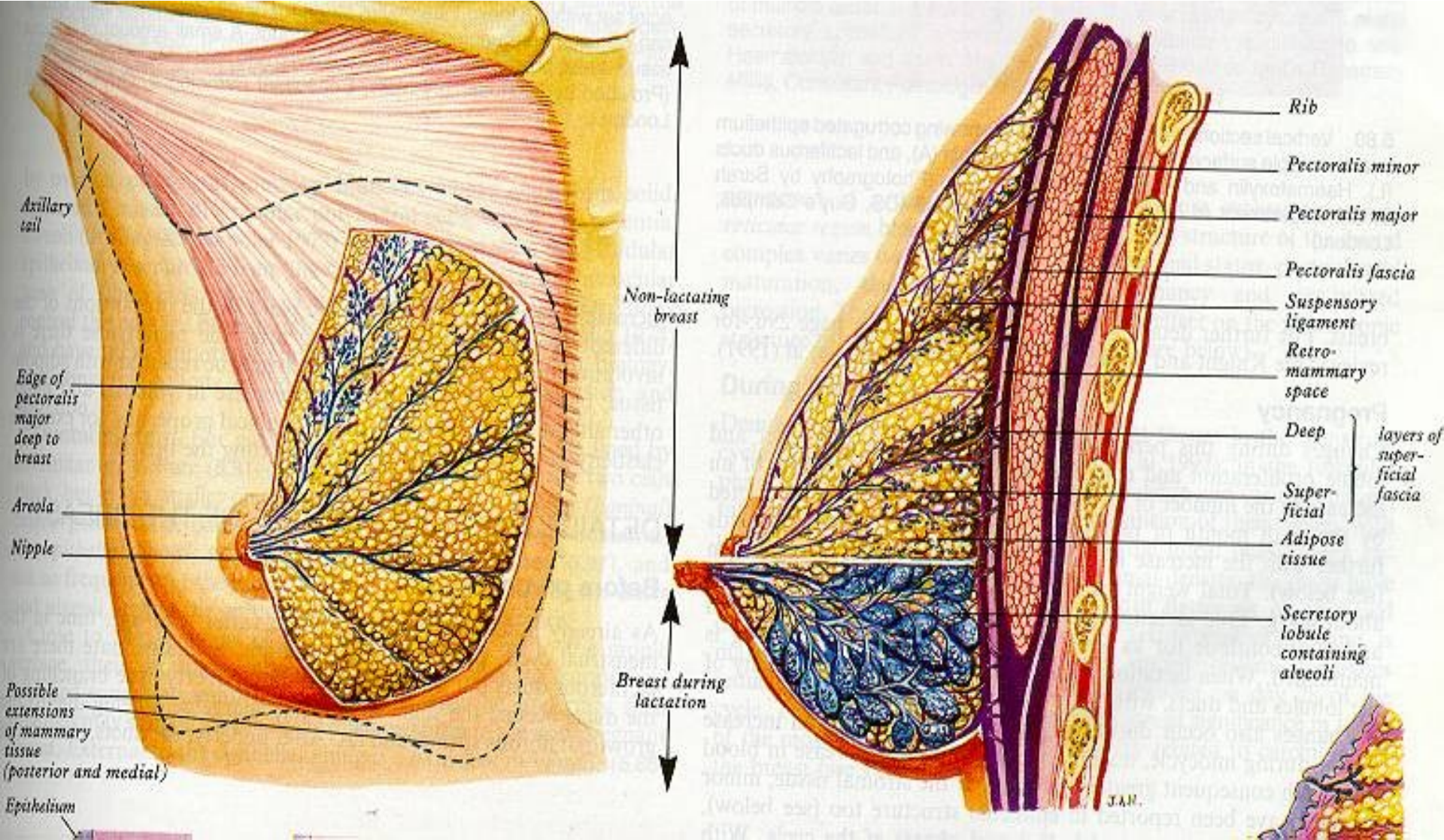
15 – 20 lobi mammae – lobuli mammae – alveoli

Ductus lactifer

Colostrum

Lactation

Prolactin



ARTERIES:

**A. thoracica int. –
rr. perforantes**

A. thoracica lat.

Aa. Intercostales

VEINS:

Circulus venosus Halleri

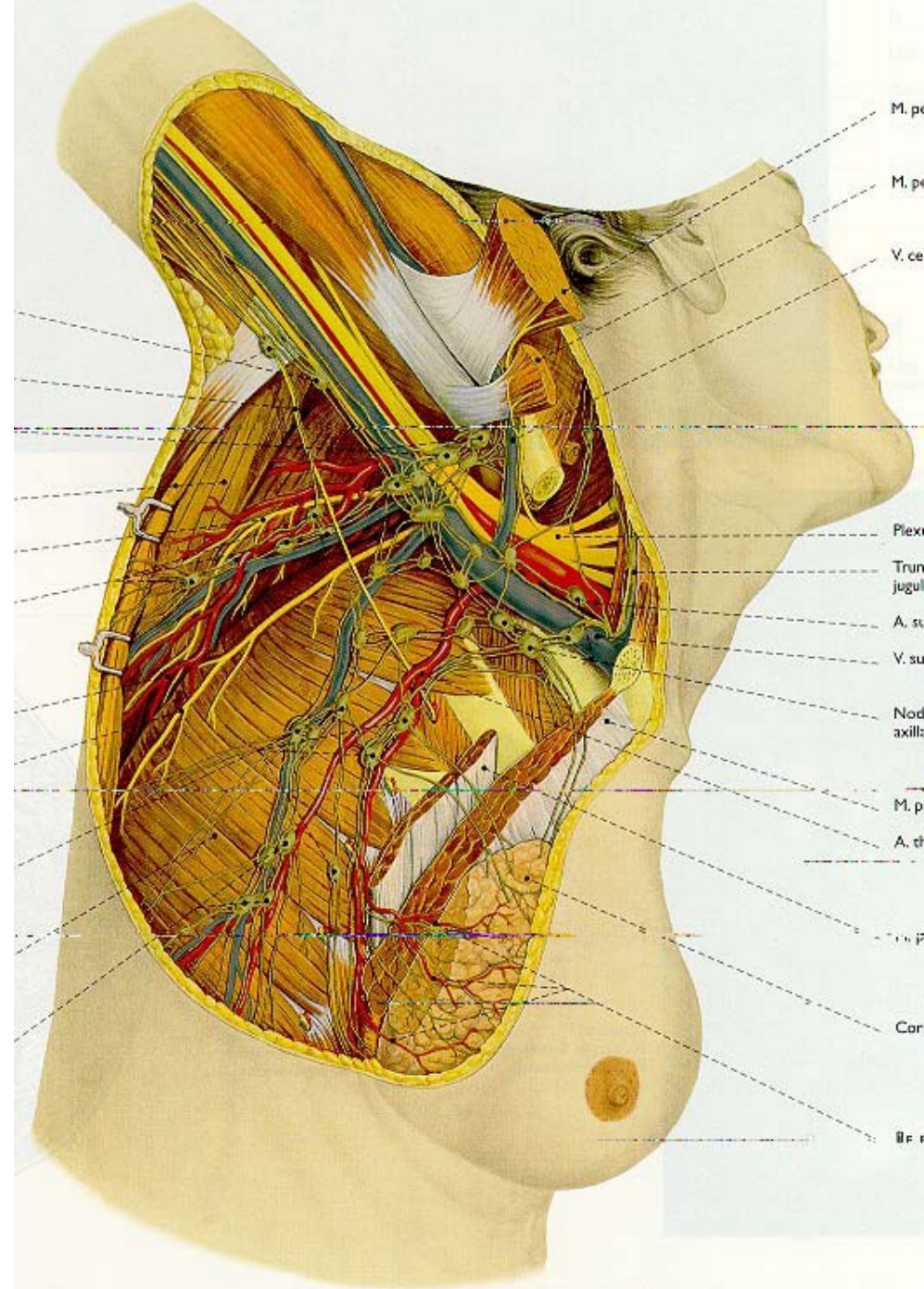
- v. thoracica int., lat.,

- vv. intercostales

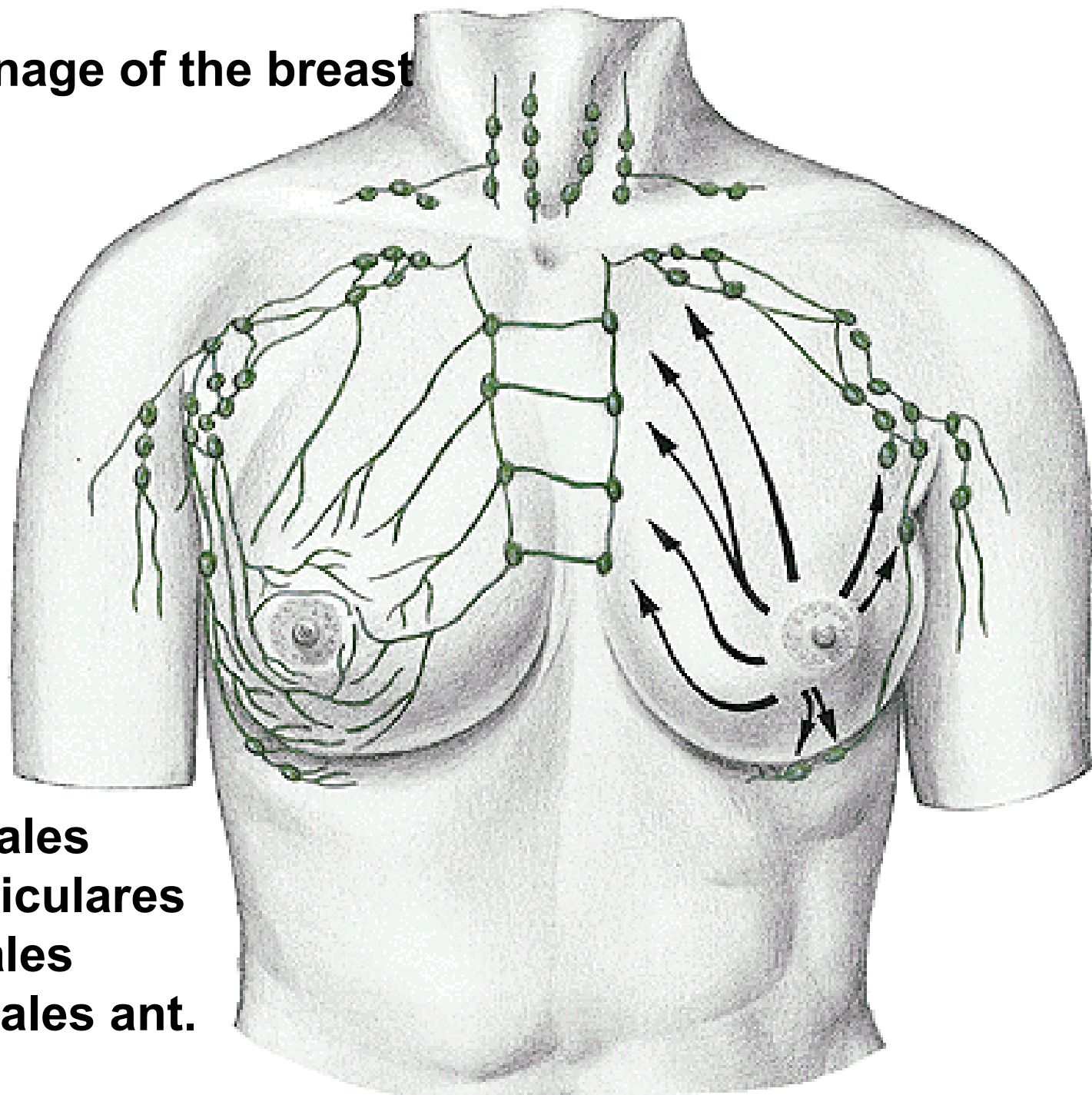
NERVES:

Nn. intercostales

Nn. supraclaviculares



Lymphatic drainage of the breast



- nll. axillares
- nll. parasternales
- nll. supraclaviculares
- nll. intercostales
- nll. mediastinales ant.

MAMMOGRAPHY

