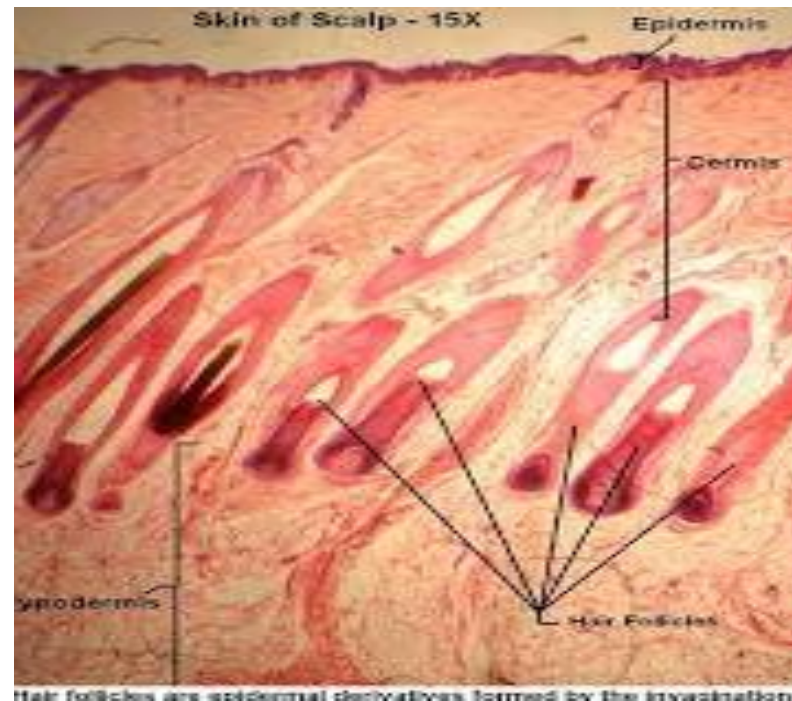


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

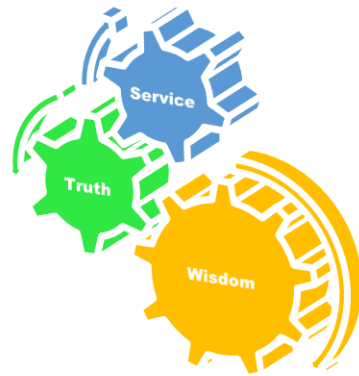
# MSK-II Module(LGIS) SKIN APPANDAGES



Presenter

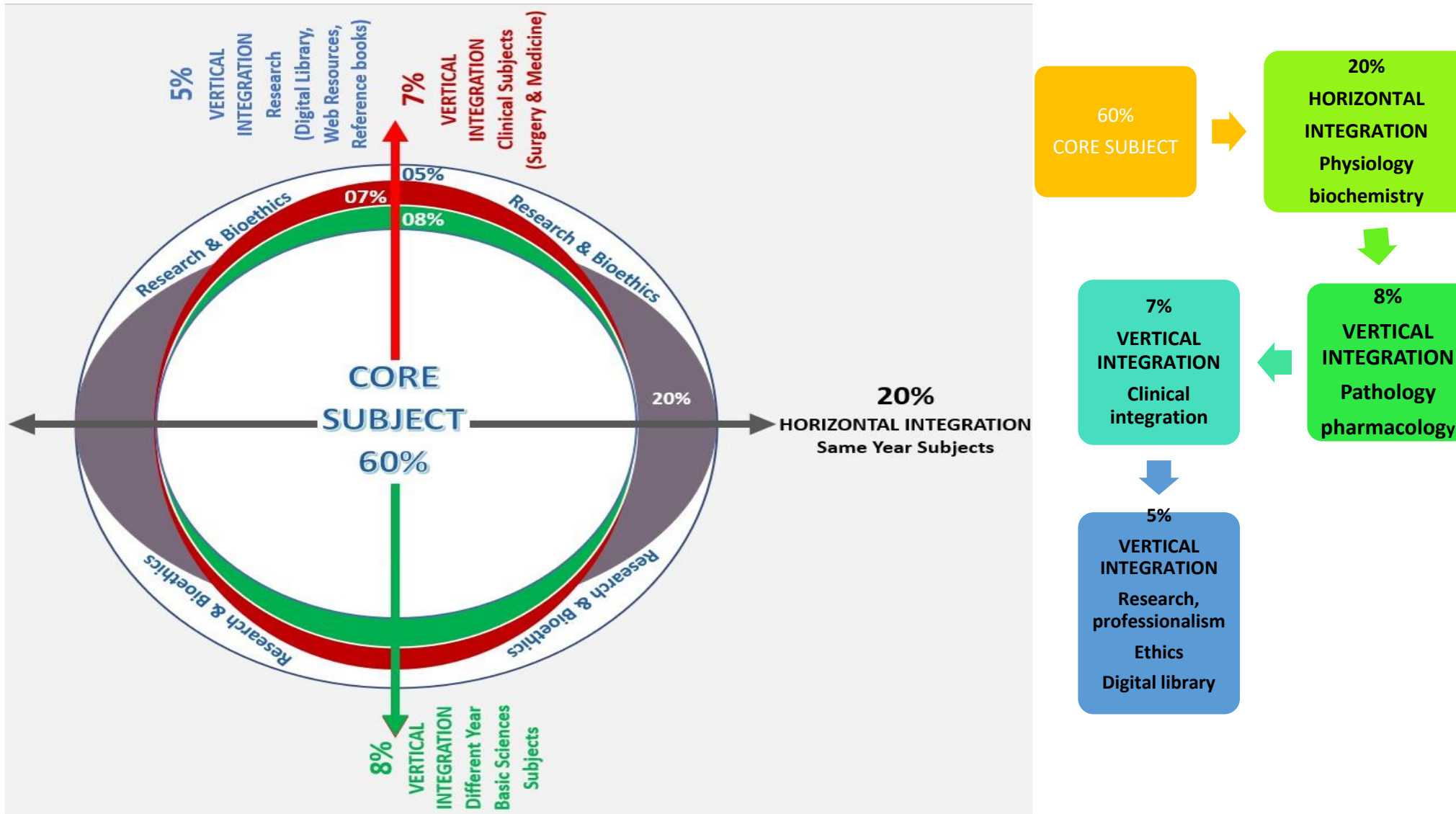
Dr. Mohtasham Hina

- **Motto**



- To impart evidence based research oriented medical education
- To provide best possible patient care
- To inculcate the values of mutual respect and ethical practice of medicine

# Professor Umar Model of Integrated Lecture



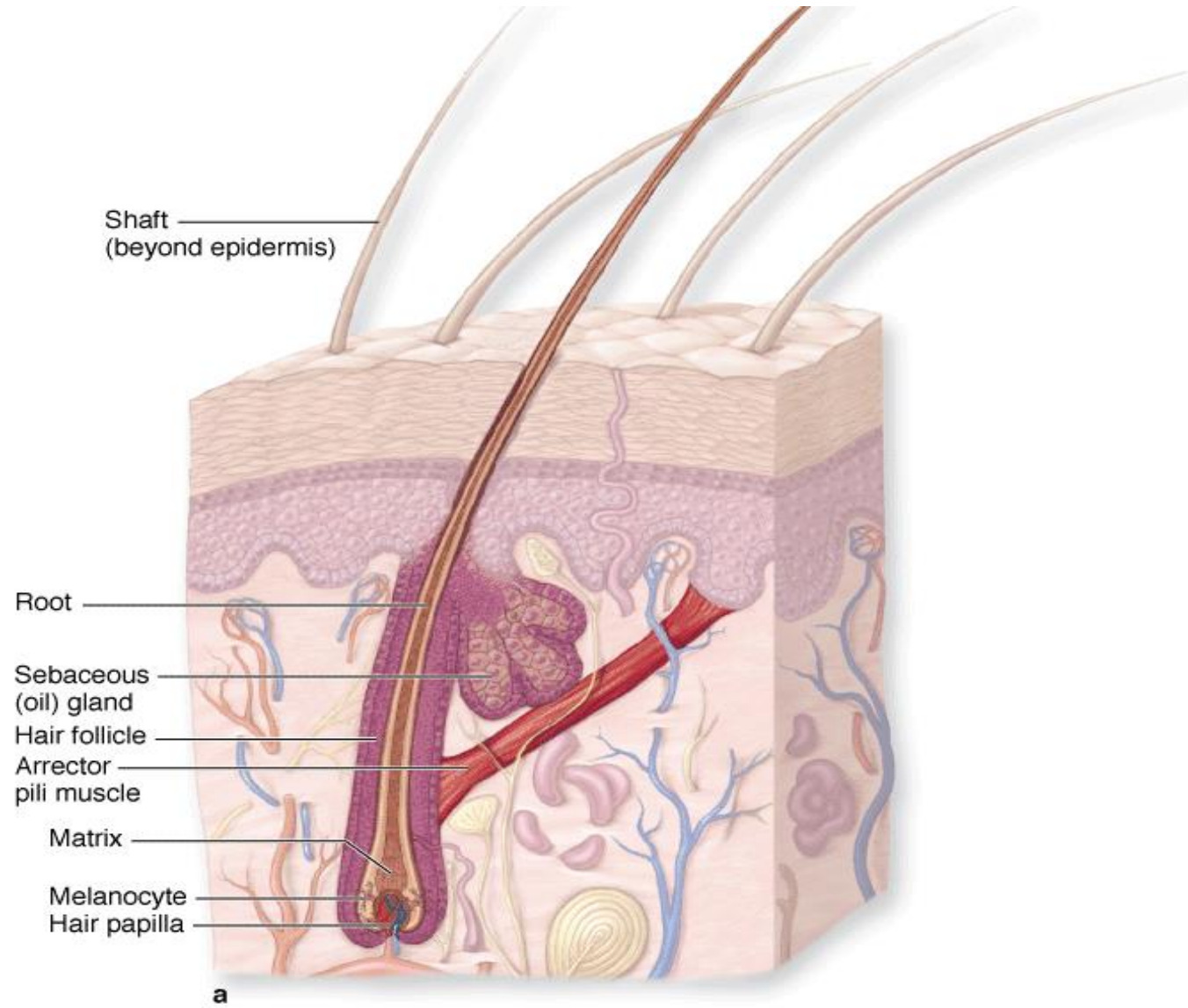
# Learning Objectives

At the end of lecture 1<sup>st</sup> year students should be able to

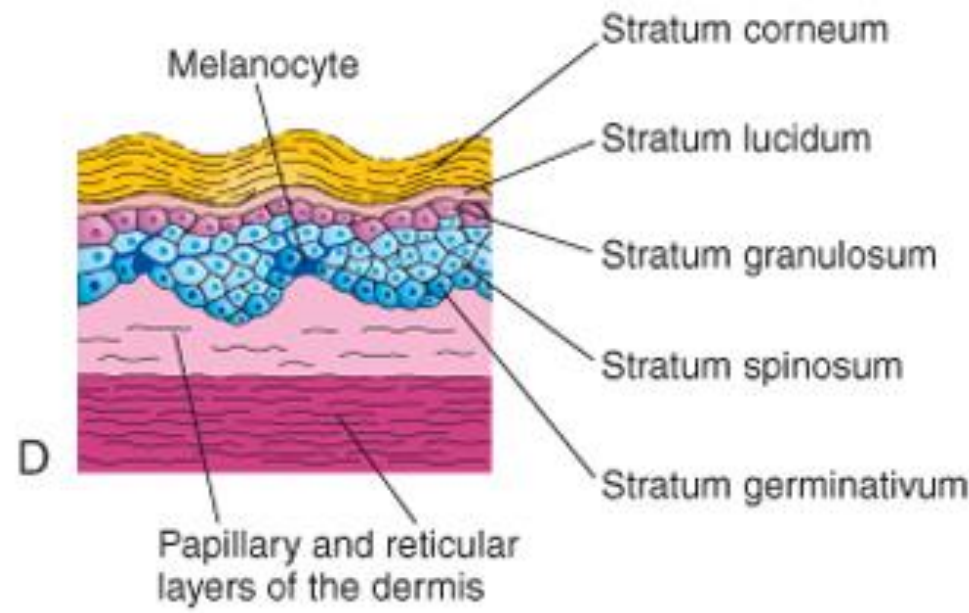
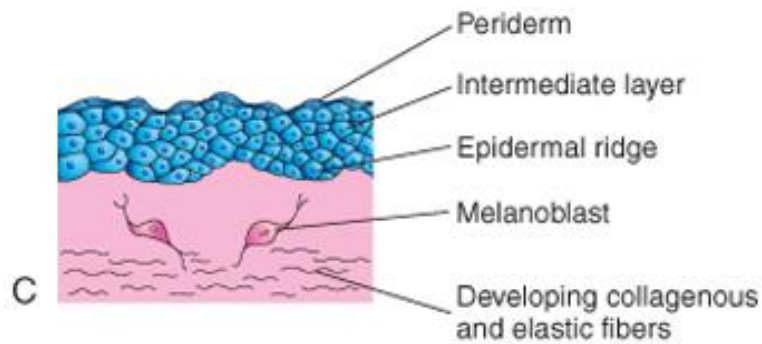
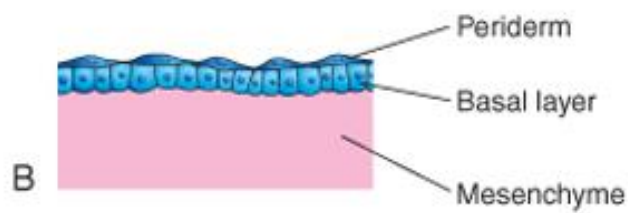
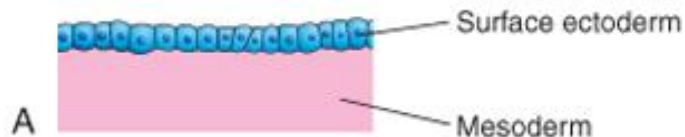
- Describe appendages of skin
- Discuss histological structure of hair
- Discuss histological structure of nail
- Discuss histological structure of glands of skin
- correlate clinical aspects
- To understand bio-physiological aspect of skin
- Read a research article
- Use digital library



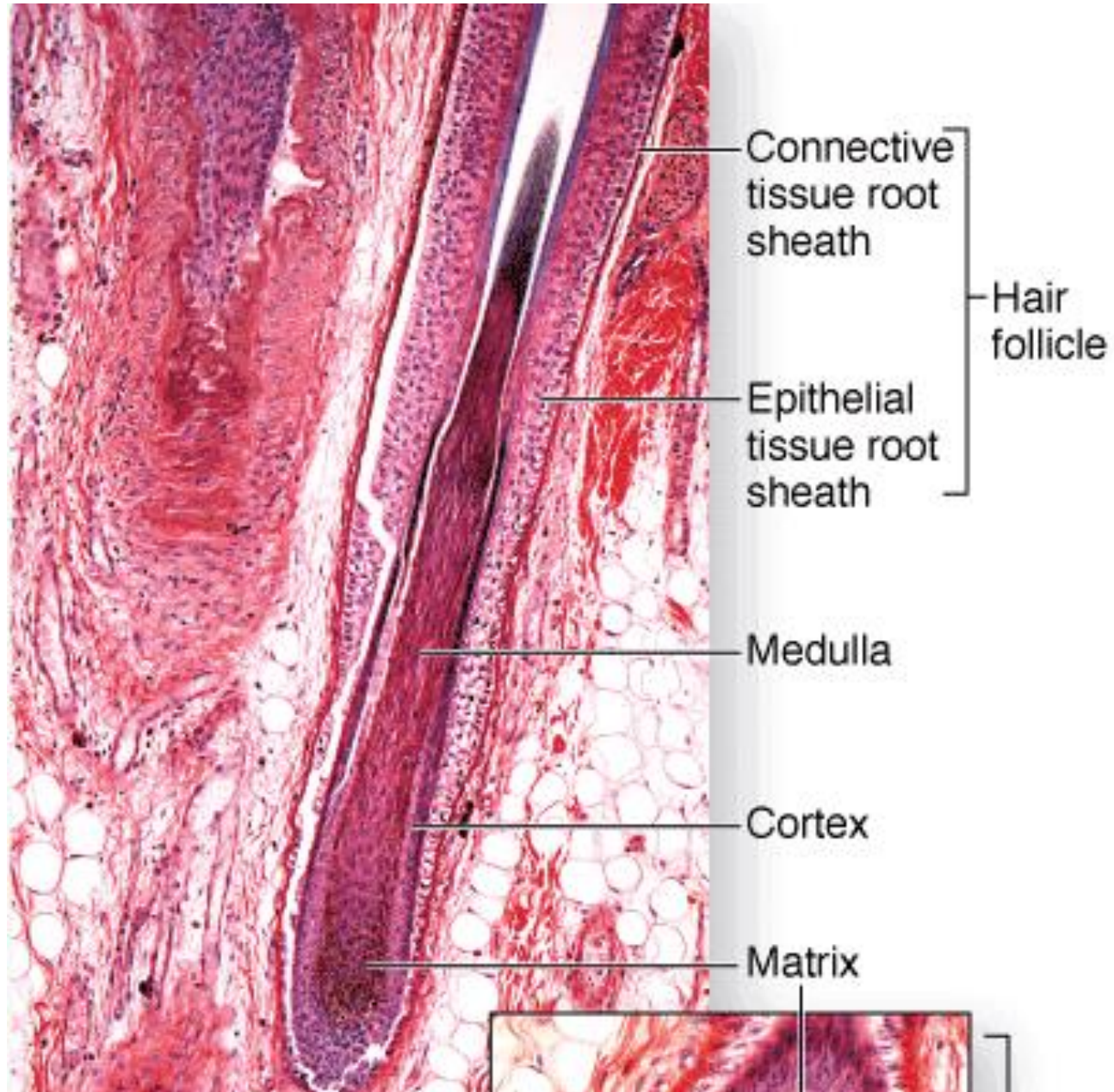
# Dermis



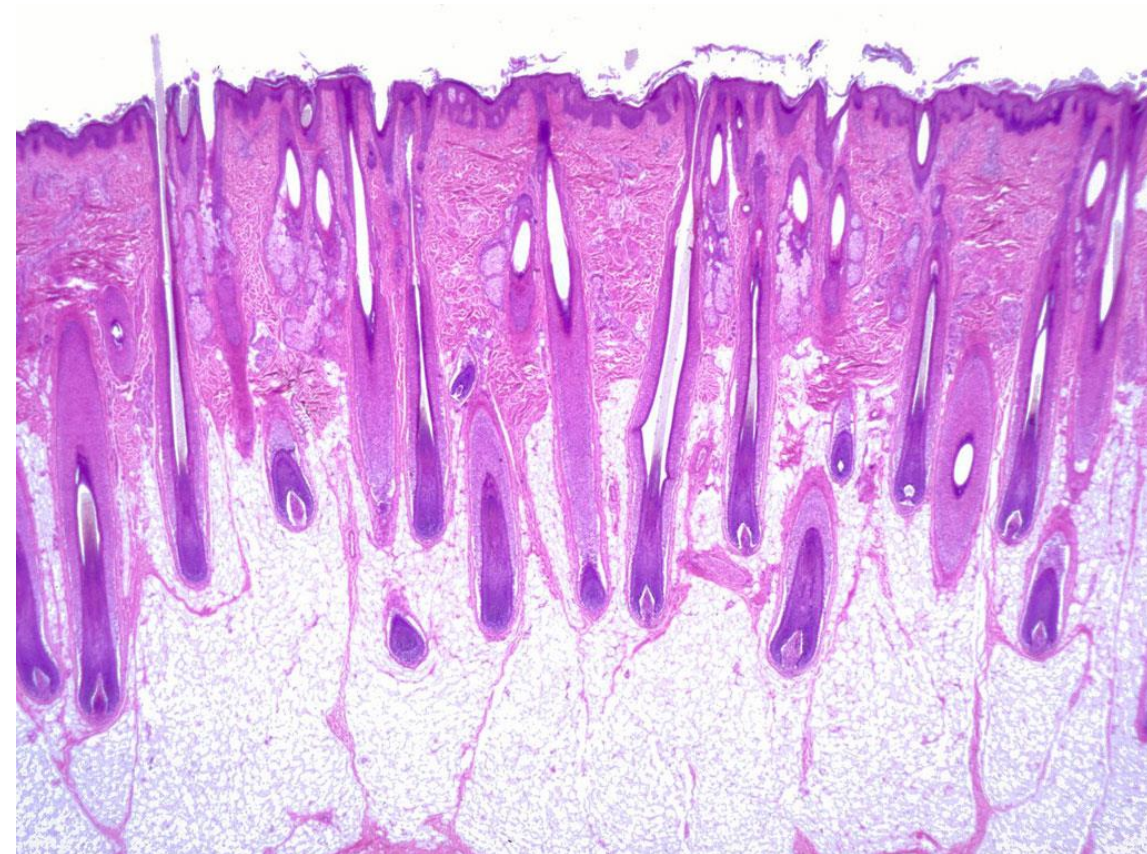
# Development Of Skin And Skin Appendages







# Hair Follicle



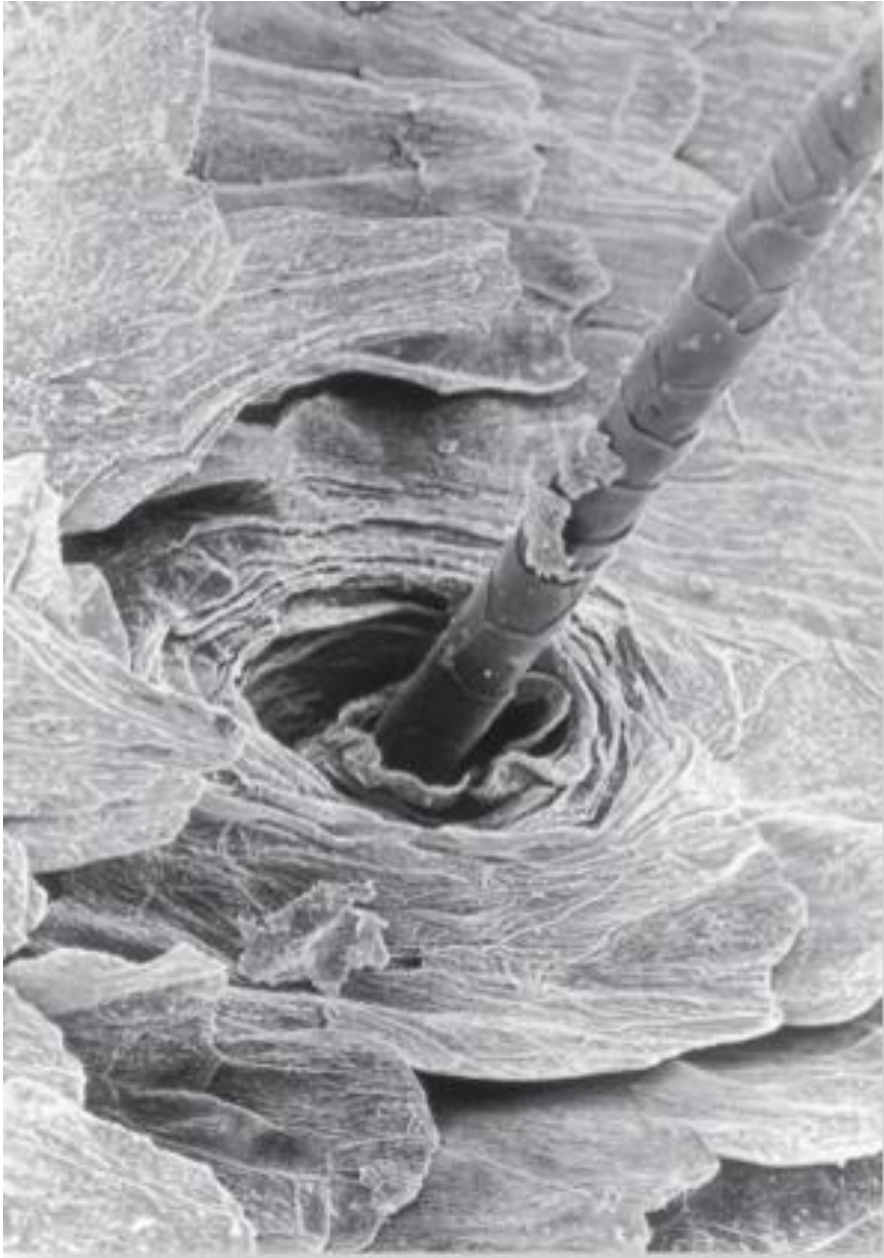




# Hair Follicle

Hair  
bulb

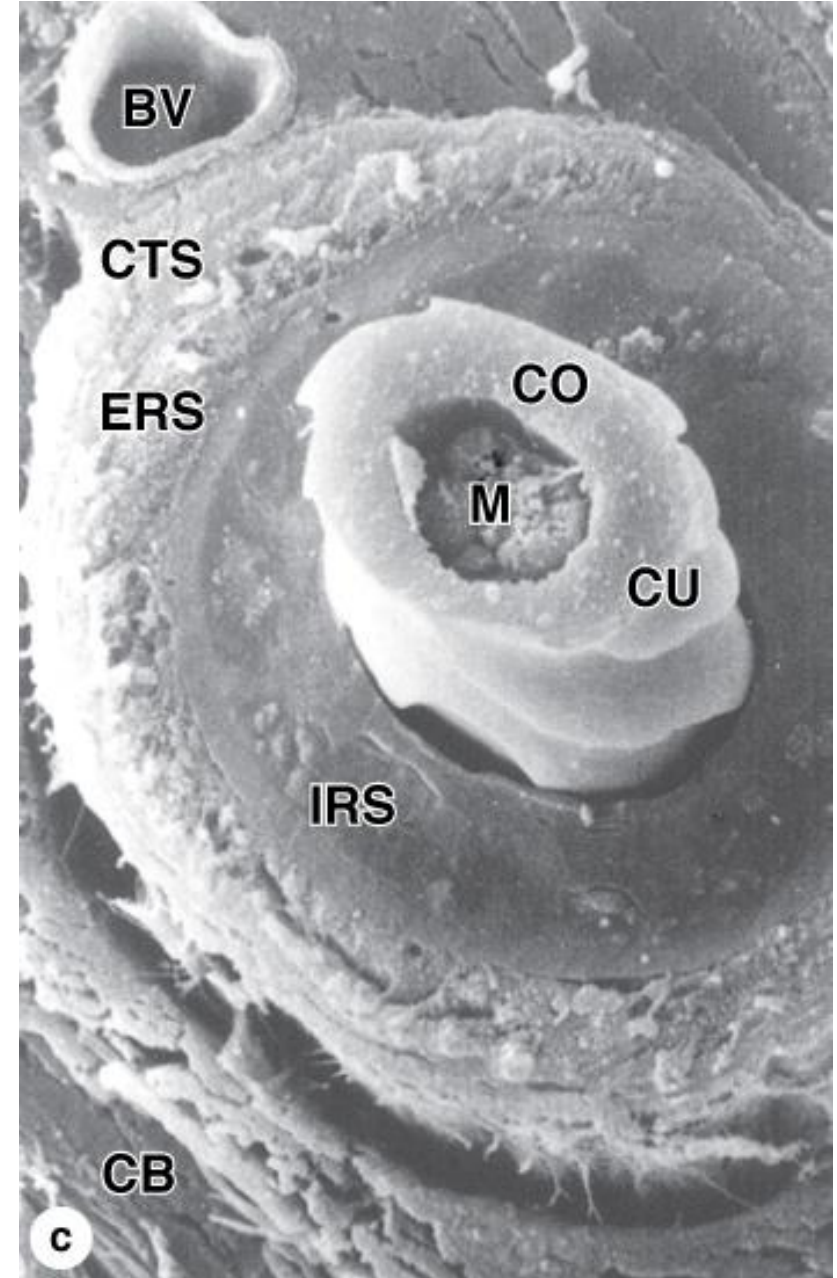
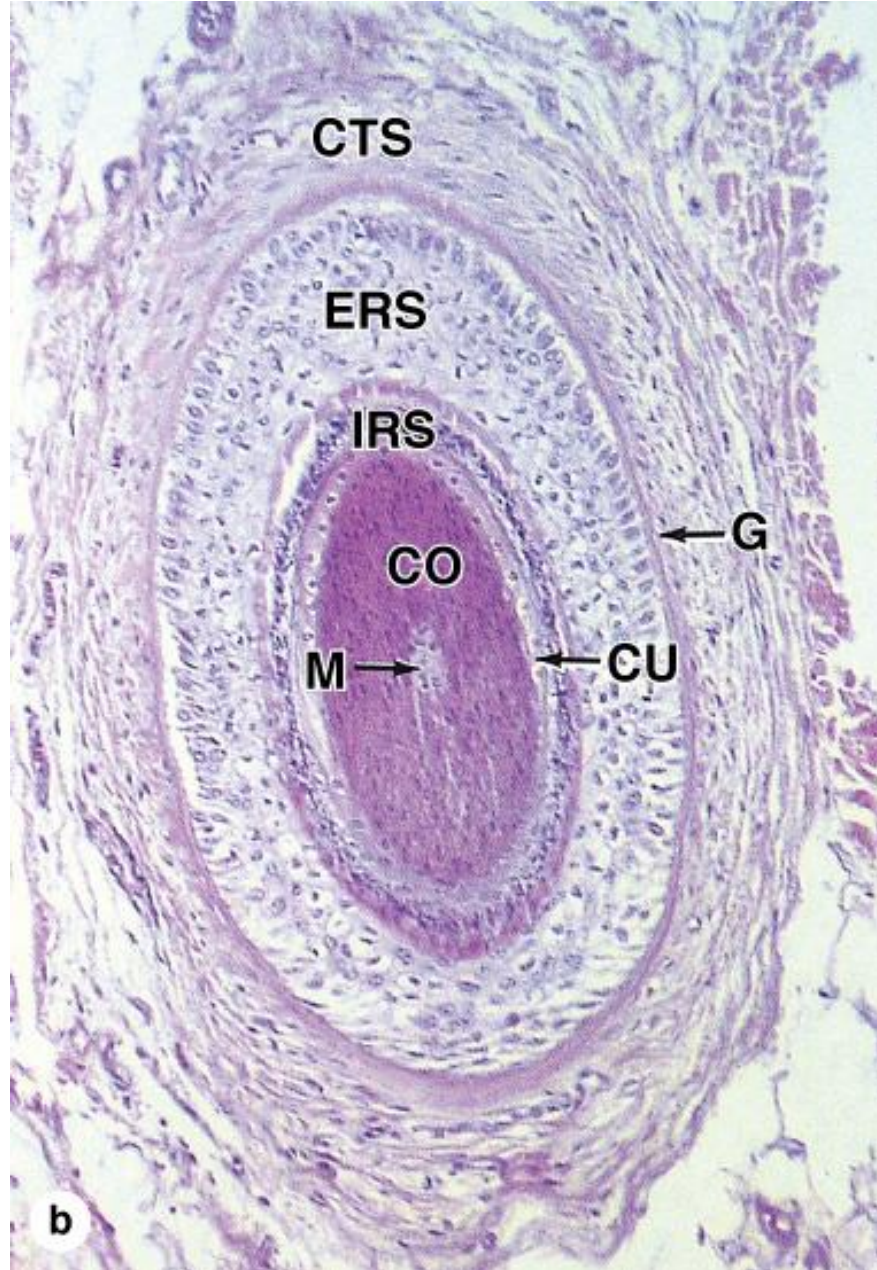
Hair papilla



# Hair Follicle



# Hair Follicle





Spiral integration

# Alopecia



# Glands of skin

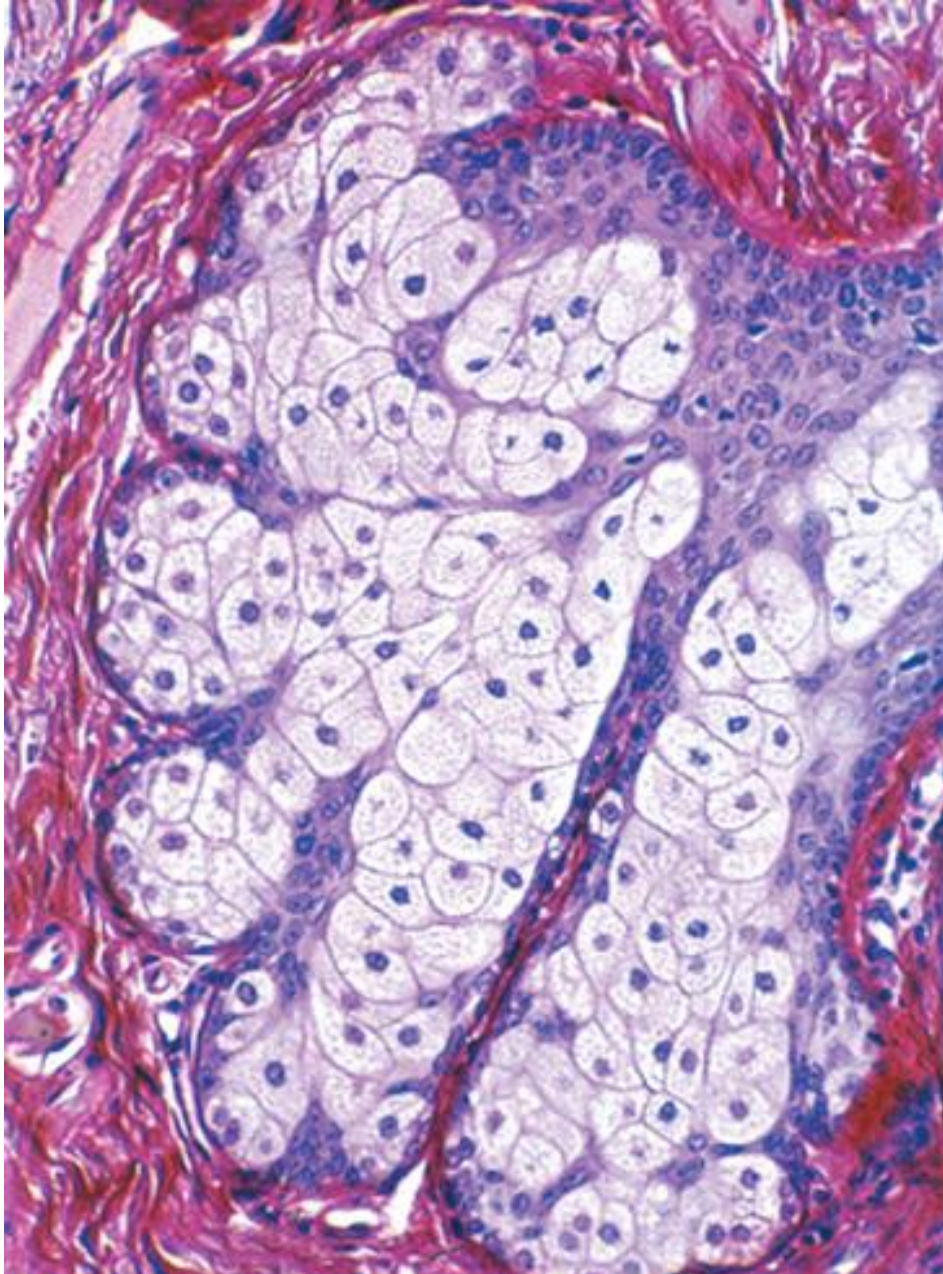
- branched acinar
- sebum





## Core Concept

- 





# Acne

- The flow of sebum is continuous, and a disturbance in the normal secretion and flow of sebum is one of the reasons for the development of **acne**, a chronic inflammation of obstructed sebaceous glands common during and after puberty



- **Topical medications**
  - Retinoids and retinoid-like drugs
  - Antibiotics
  - Azelaic acid and salicylic acid

**Oral medications**

**Antibiotics**

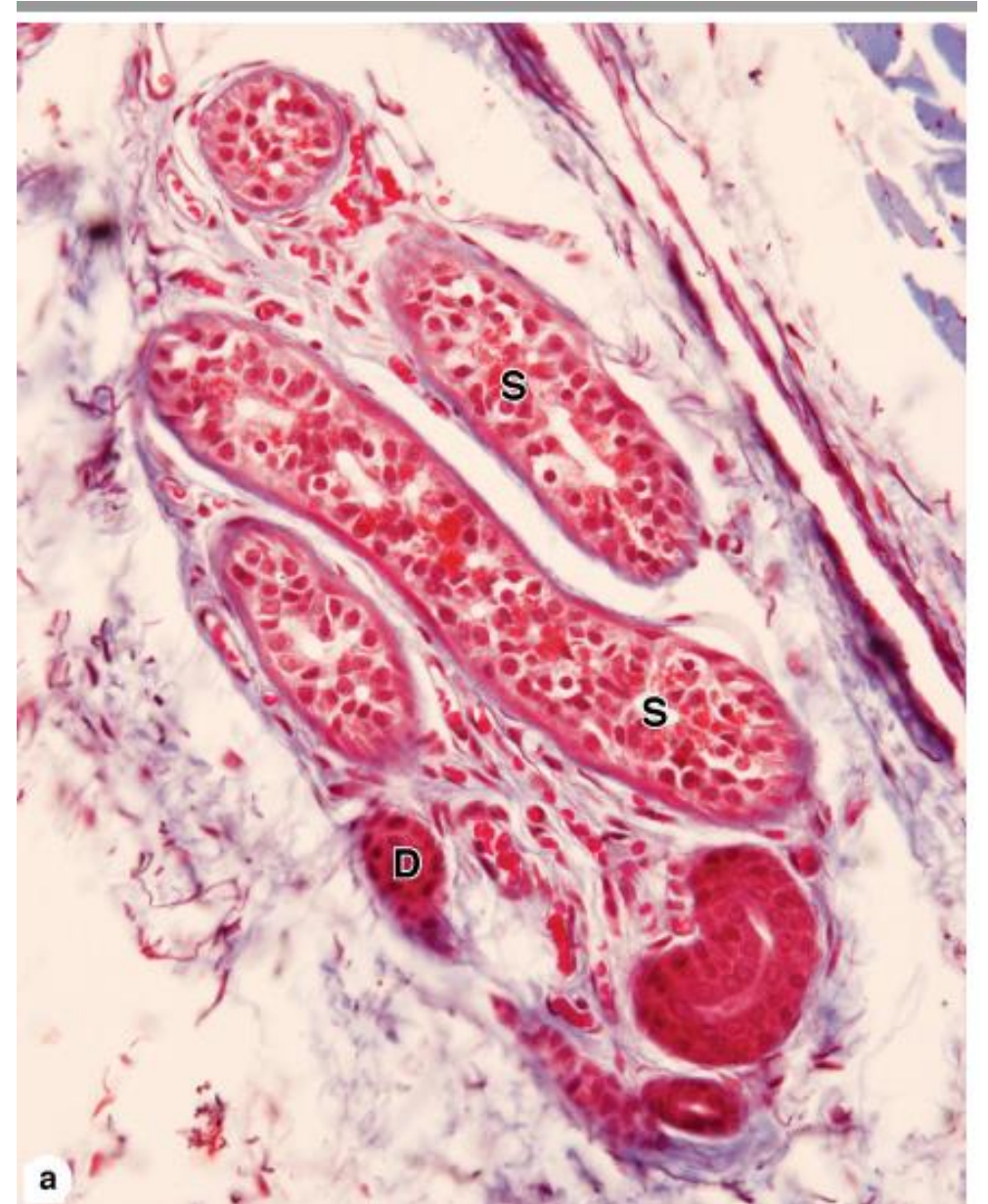
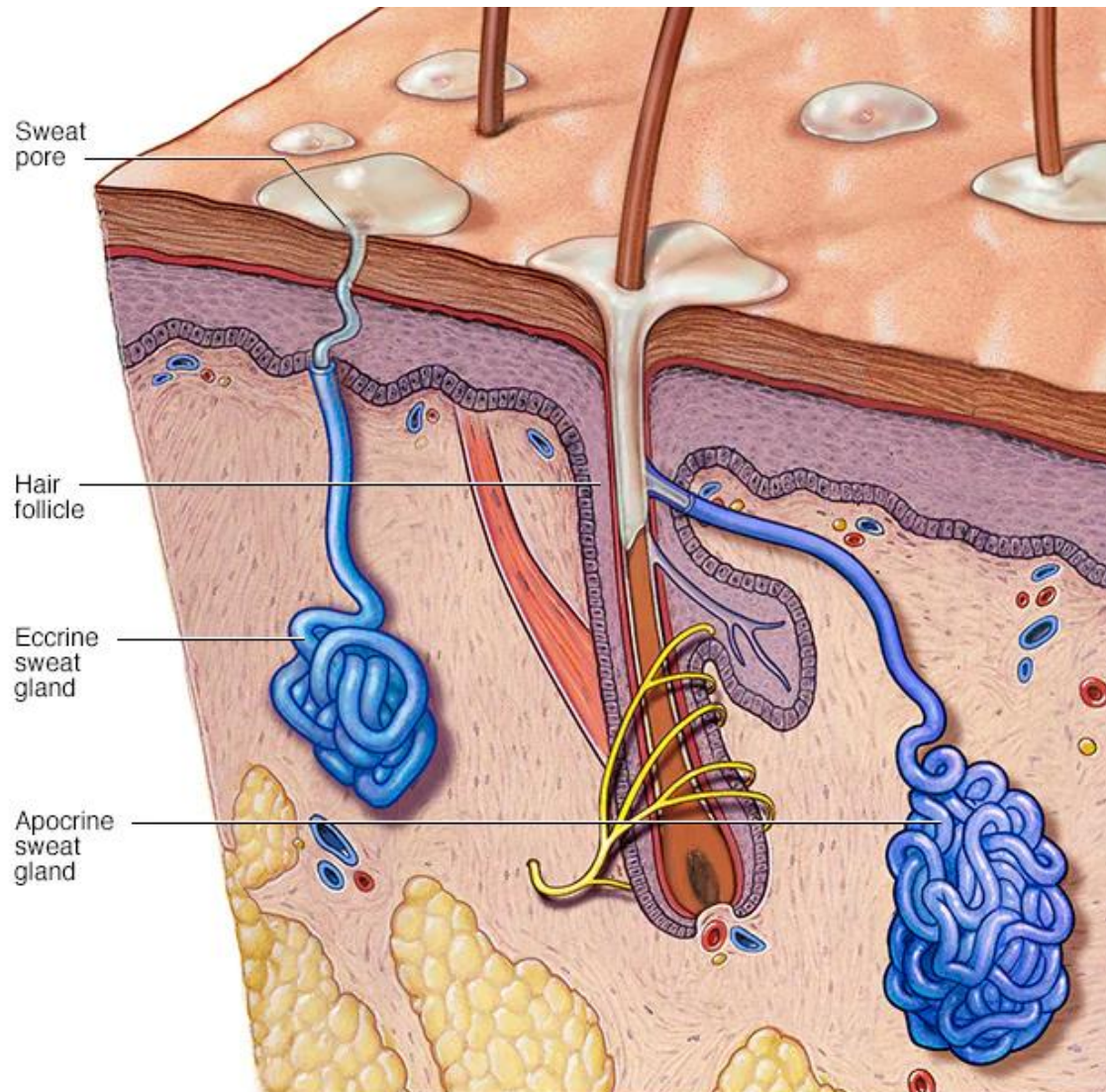
**Anti-androgen agents**

**Isotretinoin**

- **Establish Rapport and Understand Concerns**
- **Build Trust**
- **Listen Actively**
- **Educate About Acne Vulgaris**
- **Explain the Condition**
- **Dispelling Myths**
- **Course of the Disease:** Inform the patient that acne is a common condition, especially during adolescence, and that it can often be managed effectively with proper treatment.
- **Discuss Treatment Options**
- **Tailored Treatment Plan**
- **Topical Treatments**



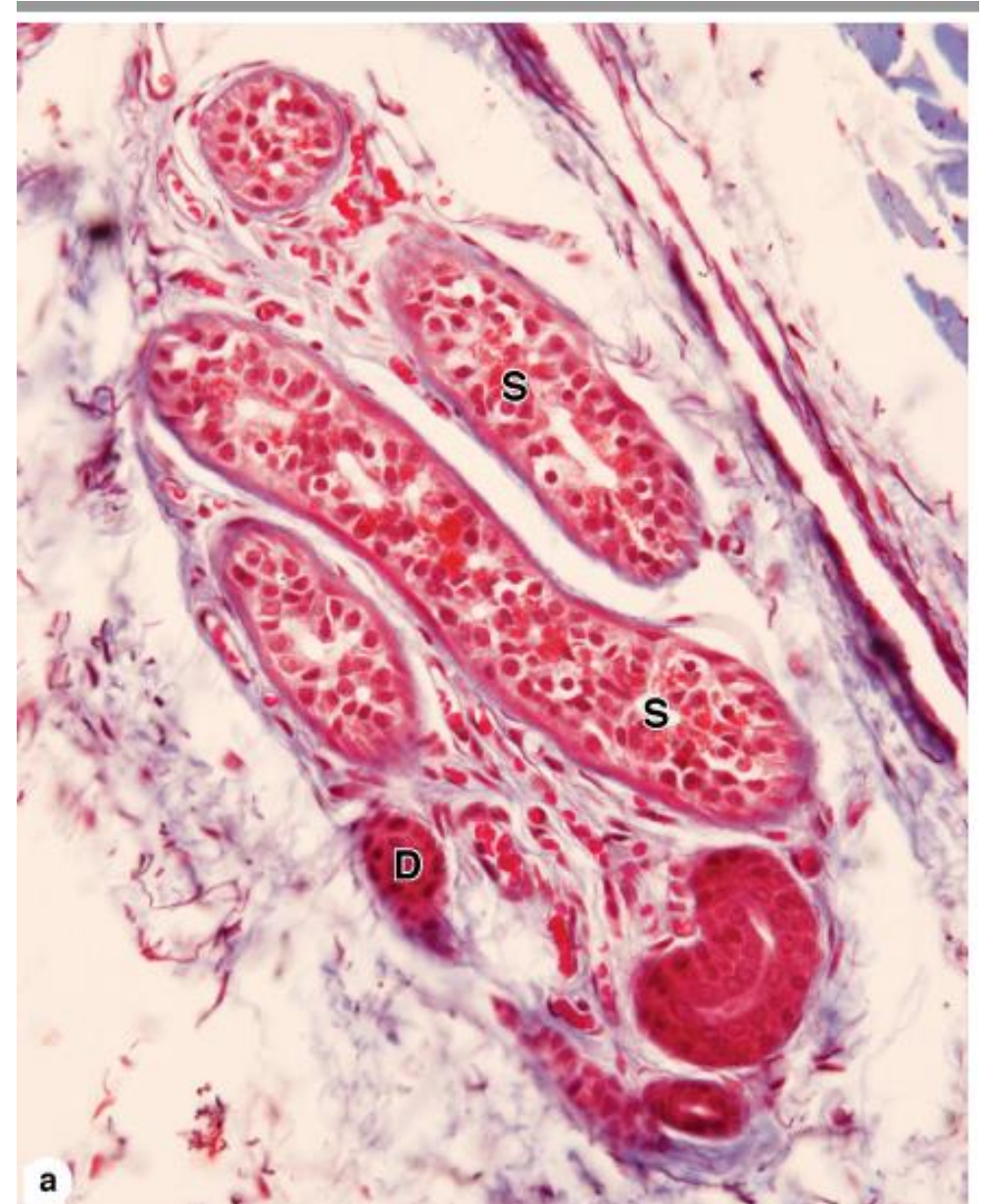
# Ecrrine Sweat Glands





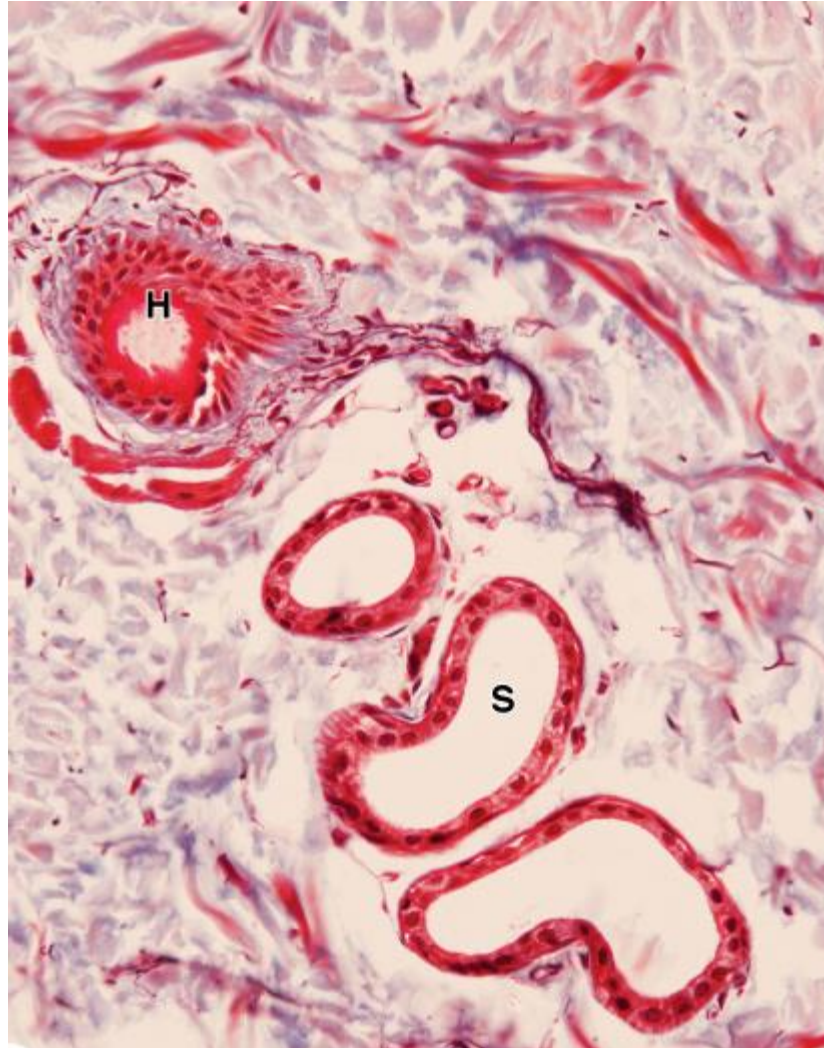
# Eccrine Sweat Glands

- Clear cells
  - Produce sweat
- Dark cells
  - Pyramidal
  - Do not rest on basal lamina
- Myoepithelial cells



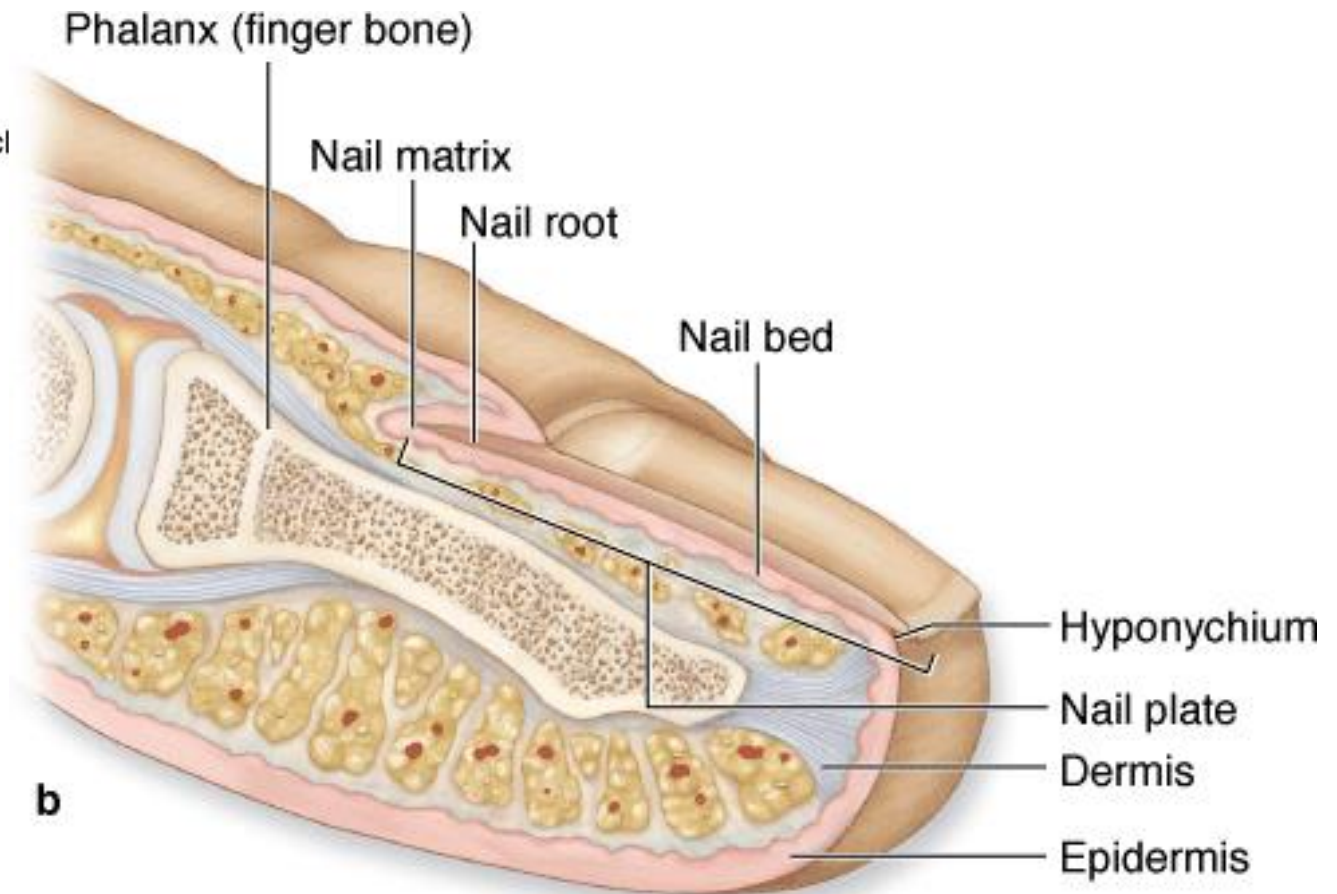
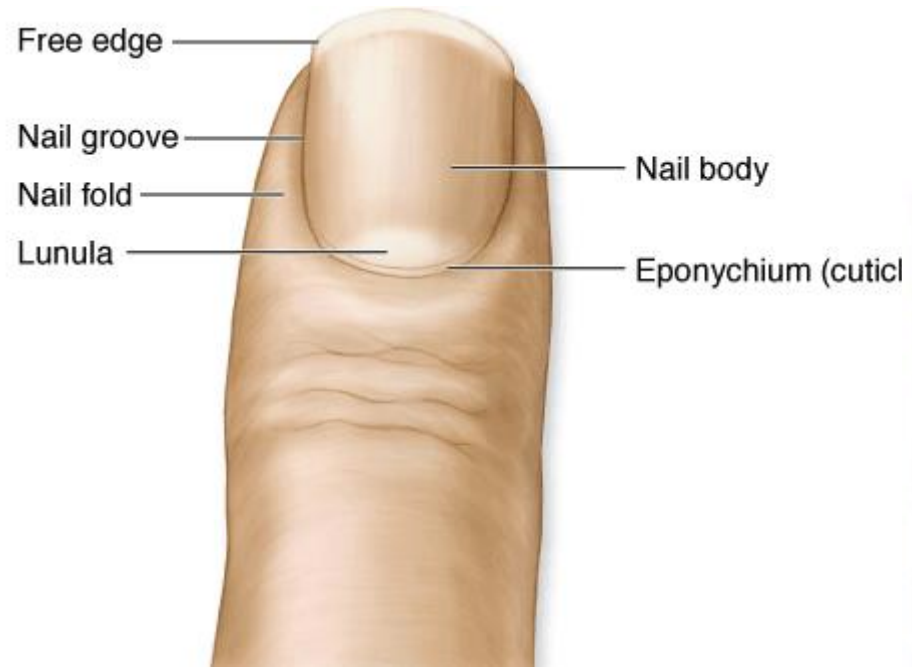
# Apocrine sweat glands

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## Core Concept



# Research article

- A vertical integration n Overview of Alopecias
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3935391/#:~:text=Ji%20Qi%20and%20Luis%20A.%20Garza>
- Hair loss is a topic of enormous public interest and understanding the pathophysiology and treatment of various alopecias will likely make a large impact on patients' lives. The investigation of alopecias also provides important insight in the basic sciences; for instance, the abundance of stem cell populations and regenerative cycles that characterize a hair follicle render it an excellent model for the study of stem cell biology. This review seeks to provide a concise summary of the major alopecias with regard to presentation and management, and correlate these to recent advances in relevant research on pathogenesis

# Learning Resources

- Junqueira's Basic Histology 13<sup>th</sup> Edition, Chapter 18
- Histology , A text and Atlas by Michael H.Ross 6<sup>th</sup> Edition, Chapter 15
- Google scholar

<https://pubmed.ncbi.nlm.nih.gov/?term=Tedesco%20FS%5BAuthor%5D>