

# Axilla /histology slide

Skin in the axilla consists classically of the *epidermis* and the *dermis*, which contains sebaceous glands. The *hypodermis* (subcutaneous tissue) contains the typical **apocrine glands**.

## Layers

### Epidermis

The epidermis (skin) consists of **stratified squamous** epithelium with **cornification**. It regularly runs into the dermis layer and thus creates *epidermal ridges*. On the cross-section, we distinguish five layers: *str. basale*, *str. spinosum*, *str. granulosum*, *str. lucidum* and *str. corneum* (for a more detailed description, see the article thick skin).

### Dermis

The dermis develops from mesenchyme and consists of ligaments, that strengthen the epidermis. In some places, it runs into the epidermis and thus creates *dermal papillae*. It contains sebaceous glands. It consists of two layers: *str. papillare* and *str. reticulare* (for a more detailed description, see the article thick skin).

### Hypodermis

The hypodermis (subcutaneous tissue) consists of thin tissue, apocrine sweat glands (eccrine – simple twisted tubular glands opening onto the surface of the skin, basally they are surrounded by myoepithelial cells).

## Glands

### Apocrine glands

Located in the subcutaneous tissue, the apocrine glands produce an aromatic secretion. They are 3-5 mm in size (diameter), lined by a **single-layer cubic epithelium**. They look "empty", they open into hair follicles (cells secrete their apical parts together with the secretion). On the surface of the skin, [bacteria] break down the secretion, which creates a characteristic odor.

### Sebaceous glands

It is located in the *reticular* layer in dermis. They are formed by acini attached to the hair follicle. The secretory elements of the acini stain weakly, after time they crack - **sebum** is produced. Acini are surrounded by epithelial cells, which are flattened at the base - **basal cells**. The function of these glands begins at puberty.

### Ecrine glands

Simple coiled tubular glands with ducts opening to the surface of the skin. It is located in the dermis (in the upper part).

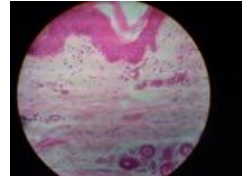
## Links

### Realated articles

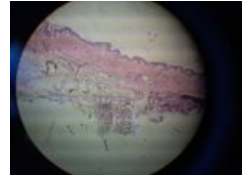
- Skin
- Skin adnexa
- Physiological activity of the skin
- Histopathological changes in the skin

### Bibliography

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- JUNQUIERA, L. Carlos – CARNEIRO, José – KELLEY, Robert O.. *Základy histologie*. 1. edition. Jinočany : H & H 1997, 1997. 502 pp. ISBN 80-85787-37-7.



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