

## Skin adnexa

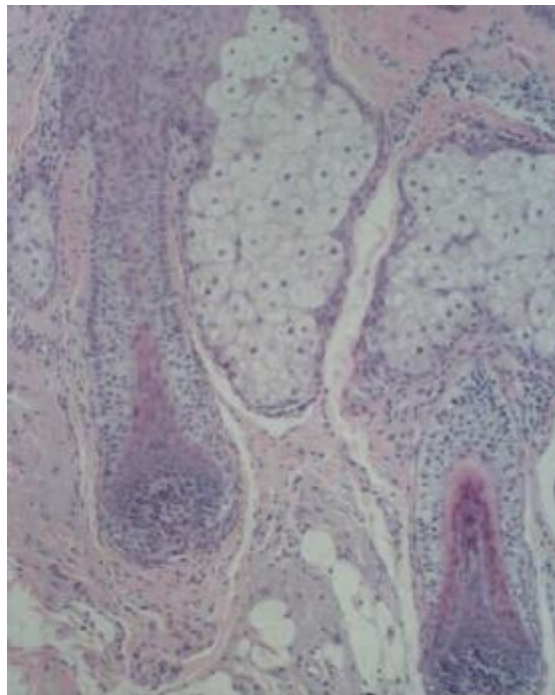
### 皮肤附件

#### Hair

The hair follicle originates from basal keratinocytes that invaginate deep into the dermis. It is part of the pilar unit which is composed of the hair follicle, sebaceous gland, and erector pili muscle (Figure 2.5). It is divided into three segments: the infundibulum, the isthmus, and the inferior segment. The hair cycle consists of the active growth phase (anagen), involutionary stage (catagen), and resting phase (telogen). The daily scalp hair growth rate averages about 0.4mm. In the adult scalp the anagen stage lasts at least 3 years, catagen phase 3 weeks, and telogen about 3 months. At any given time approximately 84% of scalp hairs are in the anagen phase, 2% in catagen, and 14% in telogen. The histologic appearance of the hair follicle changes significantly during the hair cycle.

#### 毛发

毛囊源于深陷于真皮层的基底层角化细胞，是毛发的一部分（毛发由毛囊、皮脂腺和立毛肌共同组成）（图 2.5）。毛囊分为三部分：漏斗部，峡部和下段。毛发周期包括活跃的成长期（生长期），退化期（退行期）和休止期（静止期）。头发的平均生长速度约为 0.4mm/天。成人头发的生长期至少持续 3 年，退行期为 3 周，休止期为 3 个月左右。在任何时候，都大约有 84% 的头皮毛发在生长期，2% 的在退行期，而 14% 的在休止期。毛囊的组织学外观在毛发周期显著变化。



Sebaceous glands and hair follicles.

皮脂腺和毛囊。

Three types of pigment granules are present in hair:

erythromelanin granules seen in red hair, eumelanin granules abundant in dark hair, and

pheomelanin melanosomes that predominate in blond hair. In gray and white hair the melanocytes in the basal layer of the hair matrix are greatly reduced in number or absent.

头发具有三种类型的色素颗粒：

红色头发中可见赤黑色色素颗粒，黑色头发可见丰富的真黑色素颗粒，而在金发中褐黑色素体占主导。在灰色和白色头发中毛基质基底的黑色素细胞数量大大减少或黑色素细胞不存在。

### **Sebaceous glands**

Sebaceous glands develop as epithelial buds emanating from the hair follicle structures, and therefore usually appear on the skin in association with the hair follicles. Sebaceous glands present everywhere on the skin except for the palms and soles. Sebaceous glands not associated with hair structures occur in the areola and nipple, labia minora, and prepuce. The meibomian glands of the eyelids are modified sebaceous glands.

### **皮脂腺**

皮脂腺发展为发源于毛囊结构的上皮细胞，因此通常出现于与毛囊相关联的皮肤。皮脂腺分布于任何皮肤，除了手掌和脚掌。不与毛发结构相关的皮脂腺主要位于乳晕与乳头、阴唇和阴蒂包皮。眼睑的睑板腺是改良版的脂腺。

A sebaceous gland consists of one to several sebaceous lobules and a single excretory duct, which leads the sebum through the hair follicle towards the skin surface. There is no relationship between the size of the sebaceous gland and the size of the associated hair. In the center of the face the sebaceous glands are large, while the associated hair is of the vellus type.

一个皮脂腺包含一个至数个皮脂腺小叶和单个排泄管，从而可以通过毛囊向皮肤表面输送皮脂。皮脂腺的大小和关联毛发的大小没有关系。如面部中心的皮脂腺是大皮脂腺，而相关的毛发却是毫毛型。

The sebaceous lobules possess a peripheral germinative layer of cuboid cells with centrally located nuclei. Sebum secretion is formed by the decomposition of sebaceous cells (holocrine secretion). Sebaceous cell disintegration is observed in portions of the lobule located closest to the duct.

皮脂腺小叶具有位于外围发芽层的立方细胞和位于中央的细胞核。皮脂分泌是由皮脂腺细胞（全质分泌的分泌）分解形成。在最靠近导管的小叶部分可观察到皮脂腺细胞解体。

Sebaceous glands respond to androgenic stimulus by discharge of the sebum to the skin surface. Sebaceous glands are well developed at birth, due to maternal hormones. They undergo atrophy during childhood and enlarge again at puberty. Sebum is composed of triglycerides, phospholipids, and waxes.

皮脂腺通过排出皮脂到皮肤表面，而对雄激素的刺激作出反应。由于母体激素，出生时皮脂腺就发育良好，童年时期皮脂腺发生萎缩，但青春期再次扩大。皮脂是由甘油三酯、磷脂和蜡组成。

### **Sweat glands**

Two types of sweat gland are found in the skin: eccrine and apocrine. The eccrine glands originate from the fetal epidermis and are not associated with hair follicles. They are found everywhere

except for the mucocutaneous junctions. Eccrine sweat is responsible for thermoregulation. Apocrine glands are derived from the epithelium of the hair follicles, and are found mainly in the axillae, areolae, mons pubis, labia minora, prepuce, scrotum, and circumanal area. They may represent vestigial scent glands.

### 汗腺

人们发现皮肤有两种类型的汗腺：小汗腺和大汗腺。汗腺腺体源于 胎儿表皮，且与毛囊无关。他们除了皮肤粘膜交界处，随处可见。小汗腺汗负责体温调节。顶泌腺从毛囊上皮衍生，并且主要存在于腋窝、乳晕、阴阜、小阴唇、阴蒂包皮、阴囊和环肛区域。他们可代表残留的臭腺。

责任编辑：李倩颖 梁渝苓

原文来自：Injection Treatments in Cosmetic Surgery