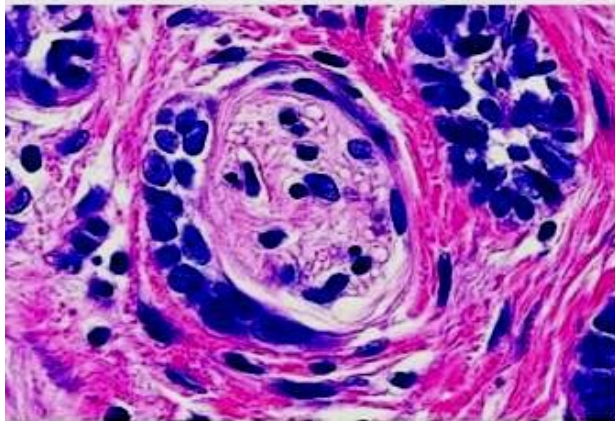
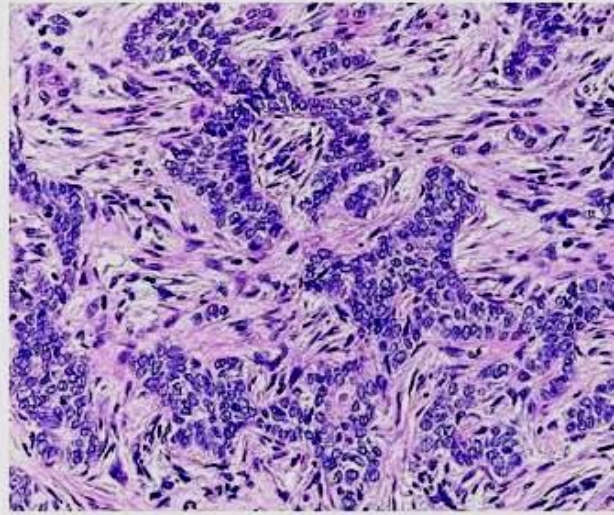
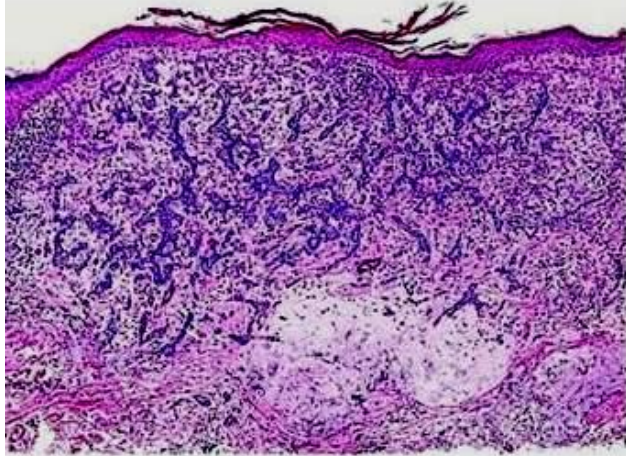


Quick diagnosis: Series G (10 cases)

1. Basal cell carcinoma, infiltrative type
2. Cutaneous lupus erythematosus
3. Angiokeratoma
4. Piloleiomyoma
5. Sarcoidosis
6. Angioleiomyoma
7. Scrotal leiomyoma (Genital leiomyoma)
8. Lipomatous dermal melanocytic nevus
9. Seborrheic keratosis
10. Cutaneous dermoid cyst

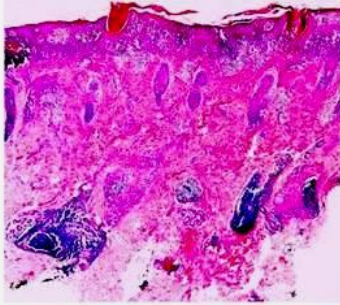
Basal cell carcinoma, infiltrative type



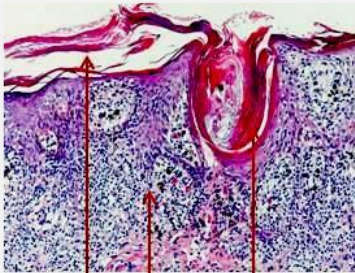
Perineural invasion

- A. Infiltrative basal cell carcinoma is a hybrid between nodulocystic and morpheaform BCC.
- B. Expansile nodules mixed with branched, angulated and linear basaloid cells.
- C. Epidermal ulceration and deep dermal invasion with perineural invasion is common. Stroma is cellular.
- D. Retraction artefact around the branched and angulated basaloid infiltrates are not present.
- E. A wider excision is required because of the infiltrating nature of this type of BCC.

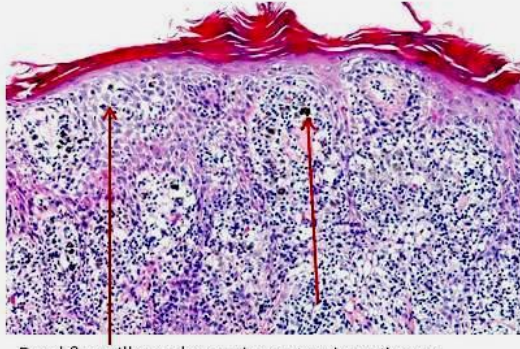
Cutaneous lupus erythematosus



Hyperkeratosis, parakeratosis, keratotic plugging of the hair pores, intense interface chronic dermatitis, superficial and deep periadnexal chronic inflammatory infiltrates.



Hyperkeratosis, keratotic plugging, interface chronic dermatitis



Basal & papillary edema, pigmentary incontinence

Microscopic:

▪Hyperkeratosis, parakeratosis, keratotic plugging of the hair pores, intense interface chronic dermatitis, superficial and deep periadnexal chronic inflammatory infiltrates.

▪Basal and papillary edema, dermal pigmentary incontinence.

▪Chronic inflammatory infiltrates around the hairs & eccrine glands

Lupus erythematosus (LE), a autoimmune inflammatory disease often affecting the skin. Discoid lupus erythematosus (DLE) is the most common chronic form of cutaneous lupus characterized by persistent scaly, disk-like plaques on scalp, face and ears with pigmentary changes, scarring and hair loss. 80% of the lesions occur above the neck, 20% may be generalized.

DLE is 5 times more common in females than males, and onset is usually between 20 and 40 years.

Most patients with DLE just have skin involvement but 5-25 % cases with DLE may develop systemic lupus erythematosus (SLE).

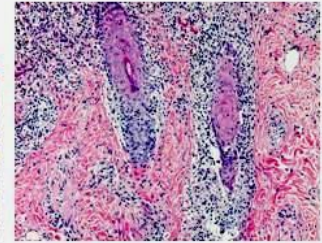


Fig 4: Chronic inflammatory infiltrates around the hairs

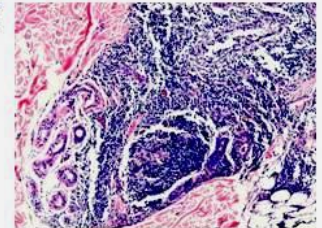


Fig 5: Intense chronic inflammation around the eccrine glands

Angiokeratoma

Angiokeratoma is a benign hemangiomatous tumor involving epidermis and upper dermis with hyperkeratotic epidermis overlying the lesion.

Angiokeratomas can be localized and systemic forms.

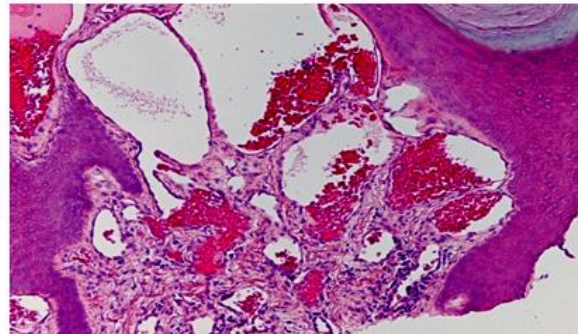
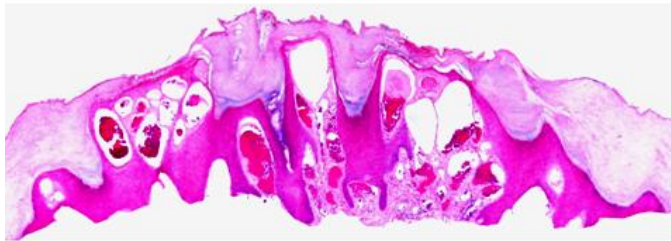
The localized forms include (1) solitary papular angiokeratoma, mostly on the legs; (2) localized angiokeratoma of the scrotum and vulva (Fordyce type); (3) the congenital form, angiokeratoma circumscriptum naviforme, which presents as multiple, hyperkeratotic, papular and plaque-like lesions, usually unilaterally on the lower leg, foot, thigh, buttock. The generalized systemic form, angiokeratoma corporis diffusum, is usually associated with Fabry disease.

Histology:

Hemangioma involving upper dermis and extending into overlying epidermis.

Epidermal hyperplasia and hyperkeratosis.

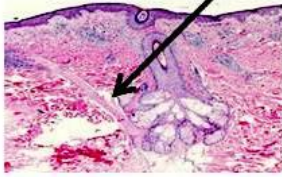
(Angio + keratinocyte + oma = Angiokeratoma)



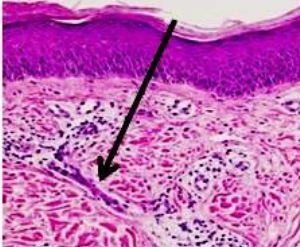
Leiomyoma cutis

Cutaneous leiomyomas are three types:

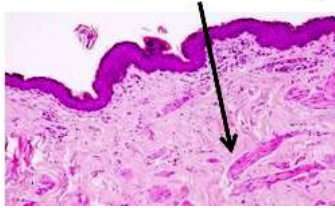
1. **Piloleiomyomas** from the **arrector pili muscle** of the pilosebaceous apparatus.



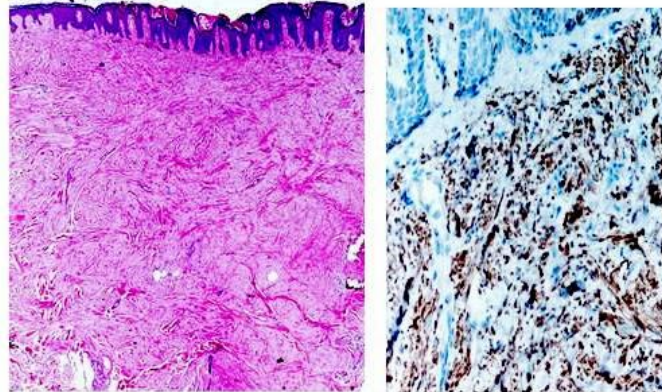
2. **Angioleiomyomas** from the **smooth muscle walls of arteries and veins**.



3. **Genital leiomyomas** from the **dartos muscle** of the scrotum and the labia majora, as well as those from the **dermal smooth muscle of the nipple**.



Piloleiomyoma M 42, left upper arm



Non-encapsulated dermal pink mass composed of whorls of smooth muscle, positive for SMA.

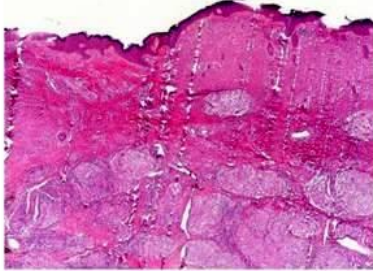
Piloleiomyoma is a benign neoplasm arising from the arrector pili in the skin.

It occurs in young adults of both genders.

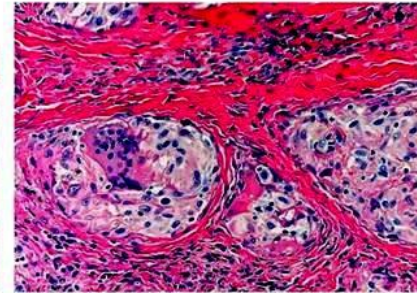
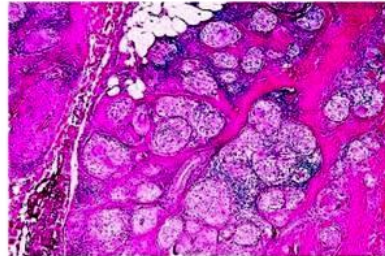
Lesions can be single or multiple and more frequently involve extremities.

Pain may occur spontaneously or after physical stimulation.

Sarcoidosis

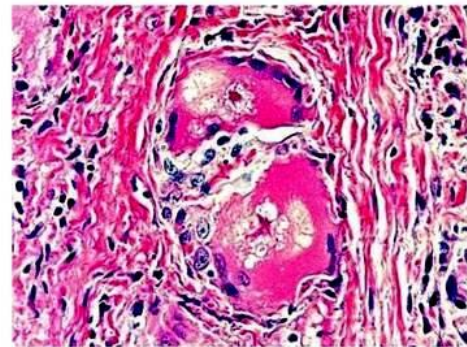


Dermal non-necrotizing epithelioid granulomas with giant cells



Non-necrotizing epithelioid granulomas with multinucleated giant cells

- Systemic disease, etiology unknown, multiple organ involvement, most common among black woman, skin involvement in 25% of cases with systemic disease.
- Non-necrotizing epithelioid granulomas in the dermis, rarely in the subcutis.
- Granulomas are not surrounded by lymphocytes ('naked granulomas').
- Special stains for fungus and acid fast organism are negative.
- Non-specific intracytoplasmic inclusion bodies, such as asteroid bodies and Schaumann bodies may be seen within the giant cells and histiocytes.

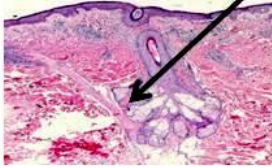


Two asteroid bodies in the giant cells

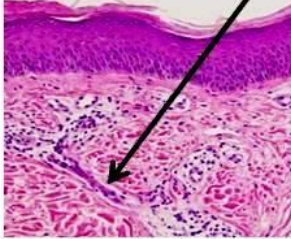
Leiomyoma cutis

Cutaneous leiomyomas are three types:

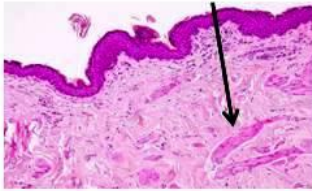
1. **Piloleiomyomas** from the **arrector pili muscle** of the pilosebaceous apparatus.



2. **Angioleiomyomas** from the smooth muscle walls of arteries and veins.

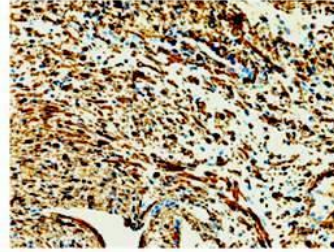
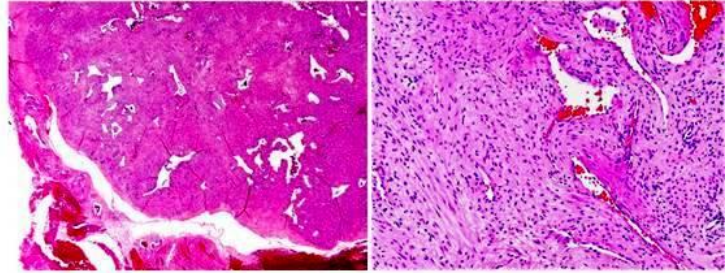


3. **Genital leiomyomas** from the **dartos muscle** of the scrotum and the labia majora, as well as those from the **dermal smooth muscle of the nipple**.



Angioleiomyoma

M 61, right 5th finger mass



SMA positive

➤ The encapsulated or well-circumscribed soft tissue tumor is composed of numerous thick-walled and thin-walled vessels with perivascular pink spindle cell proliferation.

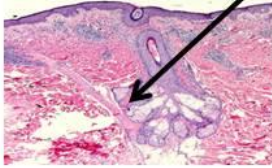
➤ There is no increased mitosis, atypical mitosis or necrosis.

➤ The spindle cells are strongly positive for smooth muscle actin (SMA) suggesting leiomyomatous nature of the tumor arising from the vessel walls.

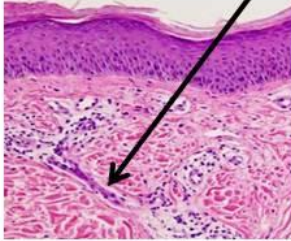
Leiomyoma cutis

Cutaneous leiomyomas are three types:

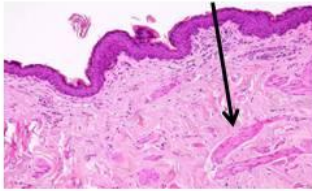
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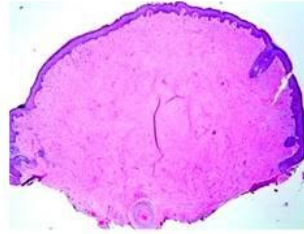


3. **Genital leiomyomas** from the **dartos muscle** of the scrotum and the labia majora, as well as those from the **dermal smooth muscle of the nipple**.

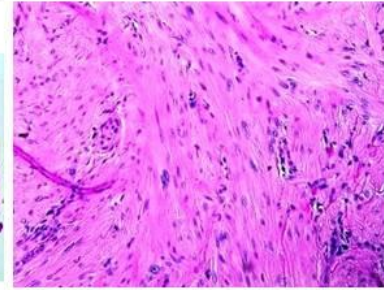


Scrotal leiomyoma (Genital leiomyoma)

M 47, painless scrotal nodule



The epidermis is raised due to an eosinophilic dermal soft tissue tumor. The overlying epidermis is essentially normal.

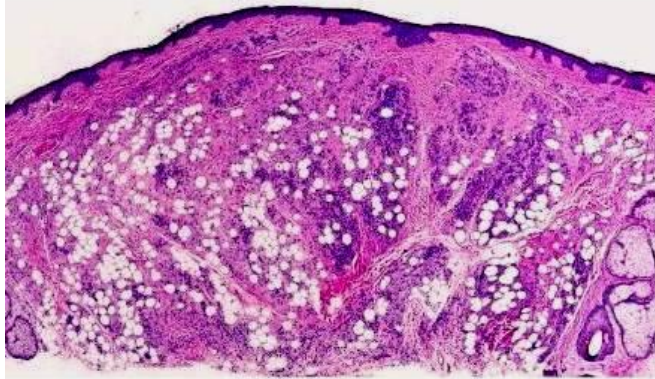


The dermal nodule is composed of bundles and fascicles of smooth muscle cells containing red fibrillar cytoplasm and elongated nuclei with blunted ends. There is no cytologic atypia, increased or atypical mitosis, or necrosis.

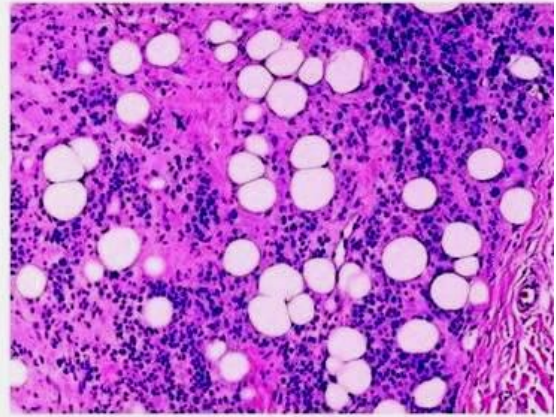
Leiomyoma of the scrotum, a rare benign smooth muscle tumor, may arise from the arrectores pili muscle (piloleiomyoma), vessel wall (angioleiomyoma), or most commonly from the dartos muscle of the scrotum (genital leiomyoma).

Scrotal leiomyoma is usually a single, painless, slow growing tumor occurring in middle-aged men. Simple excision is curative.

Lipomatous dermal melanocytic nevus M 65, scalp



Dermal nests of nevus cells with lipomatous stroma



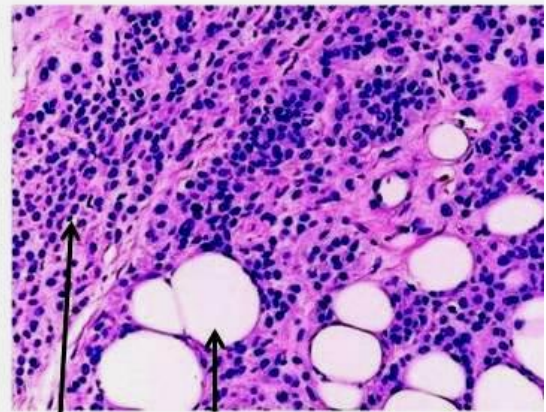
Nevus nests within fibrolipomatous stroma

Lipomatous dermal melanocytic nevus (Dermal melanocytic nevus with fatty infiltration)

Congenital melanocytic nevus may show fatty infiltration.

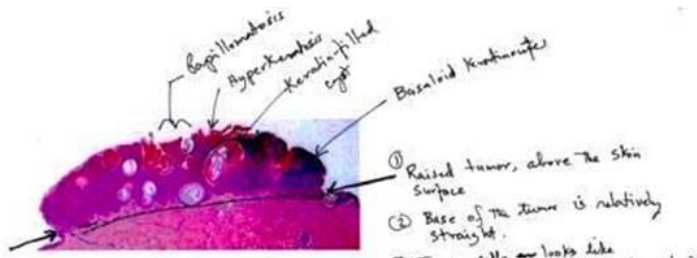
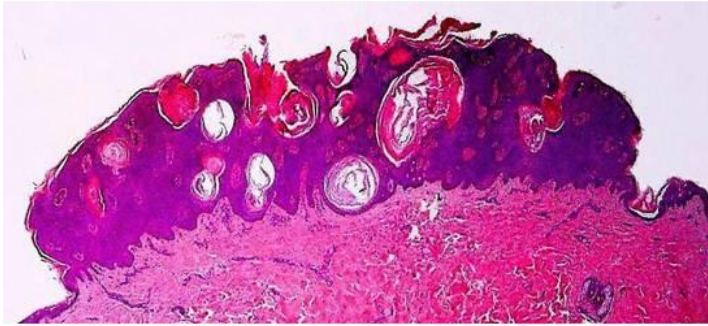
In adults, many melanocytic nevi show fatty infiltration that correlates with age.

Origin of the fatty cells remain uncertain. Possibilities include presence of nevus lipomatosus in melanocytic nevi, fatty metamorphosis of nevus cells, and adipocyte transformation from mesenchymal tissue. The nevocytes are positive with S-100 stain but the lipocytes are negative suggesting that the fat cells in this lesion probably do not arise from nevocytes. Transformation of mesenchymal element into adipocytes appear to be most likely.



Nevus cells and adipocytes

Seborrheic keratosis (SK)

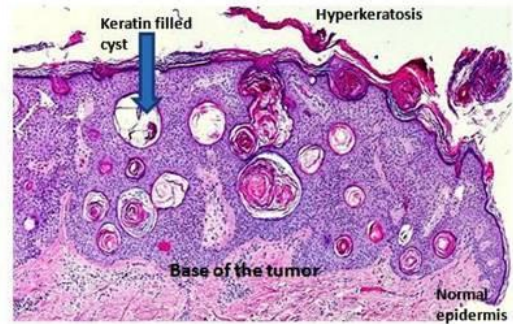


Low power pattern diagnosis of SK

- ① An elevated, dark epidermal tumor above skin surface. You can draw a straight line along the base, tumor is above this line.
- ② Hyperkeratosis (on the surface).
- ③ Papillomatosis
- ④ Keratin-filled cysts (called horn cysts)

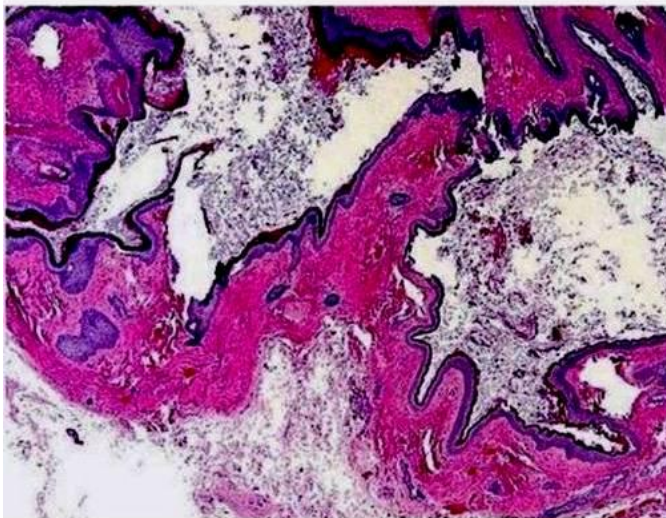
Diagnostic features:

1. Elevated, dark epidermal tumor above the skin surface.
2. Base of the tumor is relatively straight.
3. Acanthosis (proliferation of keratinocytes).
4. Hyperkeratosis (on the surface).
5. Papillomatosis.
6. Keratin-filled cysts



1. Basal cells of the adjacent normal epidermis is exactly similar to the basal cells at the base of the tumor. In other words, normal basal keratinocytes form the base of the tumor.
2. Thick layer of surface keratin (hyperkeratosis) is laminated keratin.
3. The cysts that you see are formed by invagination of the skin surface, that's why they contain laminated keratin (they are not compact pillar keratin).

Cutaneous dermoid cyst



- Unilocular subcutaneous cyst filled with keratin and hair.
- Lined by epidermis with all adnexal structures.

Clinical

- Commonly located in the face of children along the embryonic closure lines.
- May be seen in the neck midline, nasal root, forehead, mastoid area, anterior chest, and scalp.