

# Differential Diagnosis in Pediatric Dermatology

## Pilomatrixoma/Dermoid cyst.

Pilomatrixoma is a benign tumor deriving from hair matrix cells, whereas dermoid cyst derives from epidermal residua. The latter remain in the dermis during the fetal life along the lines of fusion of the embryo.

### PILOMATRICOMA



Fig. 1: Pilomatrixoma.

### DERMOID CYST



Fig. 2: Dermoid cyst.

### PILOMATRICOMA

A bit less than 0,1% of all skin diseases (1).

More frequent in females.

Whatever age, before 12 yrs in 42% of cases, exceptional before 6 months (2).

Usually one, multiple in 5% of cases.

Head, upper trunk, upper limbs.

Bluish, yellowish, red, skin colored. Exceptionally ulceration.

### *FREQUENCY*

### *SEX*

### *ONSET*

### *NUMBER OF LESIONS*

### *SITE OF LESIONS*

### *COLOR*

### DERMOID CYST

Less frequent.

No difference.

Usually at birth or in the first months.

One.

Head (lateral eyebrow, anterior fontanelle, glabellar region), neck, vertebral axis.

Skin colored, rarely red.

**PILOMATRICOMA**

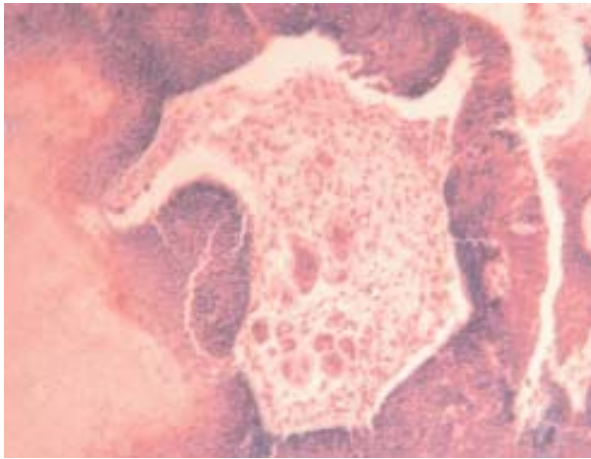


Fig. 3: In pilomatricoma you can see basal cells, shadow cells and giant cell granulomatous inflammation.

**DERMOID CYST**

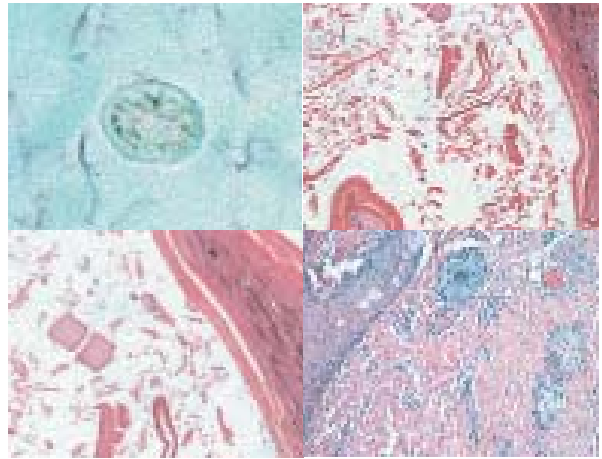


Fig. 4: Inside dermoid cyst you can see fragments of hair and crystals; adnexal structures in the surrounding dermis.

**PILOMATRICOMA**

Movable on the nodule, sometimes adherent.

None.

Hard.

Irregular surface, needle-shaped, spindle-shaped, in plaque.

0.5-3 cm.

Movable on the deep layers.

Neof ormation of basal cells, with shadow cells, granulomatous inflammation.

Removal, with esthetical purposes.

*EPIDERMIS*

*ASSOCIATE CONDITIONS*

*CONSISTENCE*

*SHAPE*

*DIAMETER*

*MOBILITY*

*PATHOLOGY*

*TREATMENT*

**DERMOID CYST**

Usually movable on the nodule.

Sometimes sinus with a tuft of hairs.

Hard-elastic.

Spherical.

1-4 cm.

Sometimes adherent to the surrounding tissue.

Cyst containing lipids, keratin and hairs, in the dermis hairs and glands.

Removal, with esthetical purposes, neurosurgery in case of sinus.

**References**

- 1) Bonifazi E., Garofalo L., Meneghini C.L. - Considerazioni epidemiologiche su 11.061 casi di dermatosi infantili. Dermatologica Clinica 1, 87-94, 1981.
- 2) Bonifazi E., Tarantino G. - Epidermal and adnexal tumors. Eur. J. Pediat. Dermatol. 10, T465-T480, 2000.