

Adnexal polyp of the skin. Report of two cases.

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Summary

We describe two newborns showing small skin-colored pedunculated papules localized on the areola of the nipple. The clinical and histological features were compatible with the diagnosis of adnexal polyp. Adnexal polyp is a small congenital tumor of the skin occurring most frequently on the areola of the nipple of the neonate.

Key words

Neonatal skin, pedunculated lesion.

The adnexal polyp is a small pedunculated tumor usually observed on the skin of the newborn. The areola of the nipple is the most frequently affected site. In the Japanese newborns the prevalence of this tumor is about 4% (1). The clinical features consist of a small, skin-colored papule with a smooth surface. It can be easily removed by a slight torsion of the fingertip to leave minute bleeding. This tumor, usually, falls off spontaneously within few days after birth. The histological features are characterized by the presence of hair follicles, vestigial sebaceous glands and sweat glands.

Case report

A two-day-old male newborn showed a smooth, whitish and pedunculate papule of few millimeters, located close to the areola of the left mammary region (Fig 1).

The histological examination of the papule disclosed, under the normal epidermis, the presence of hair follicles, vestigial sebaceous glands and well developed eccrine glands. There

were not smooth muscle fibres of the muscle "arrector pili" (Fig. 2). The clinical and histological data were compatible with the diagnosis of adnexal polyp.

The second patient was a four-day-old male infant with a skin-colored polypoid lesion with a rough and dry surface localized in the right mammary region. The lesion was removed and the histological examination was performed. At lower magnification, a unilocular cyst connected with the epidermis with a well represented granular layer and corneal lamellae was seen (Fig. 3). The lesion had the features of an infundibulo-follicular cyst.

Discussion

The adnexal polyp is a well defined tumor, that mainly involves the neonatal skin. The two described cases are clinically typical. The histologic pattern of the first lesion represents the typical findings of adnexal polyp, whereas in the second lesion the pathological findings are consistent with its regressive phase.



Fig. 1

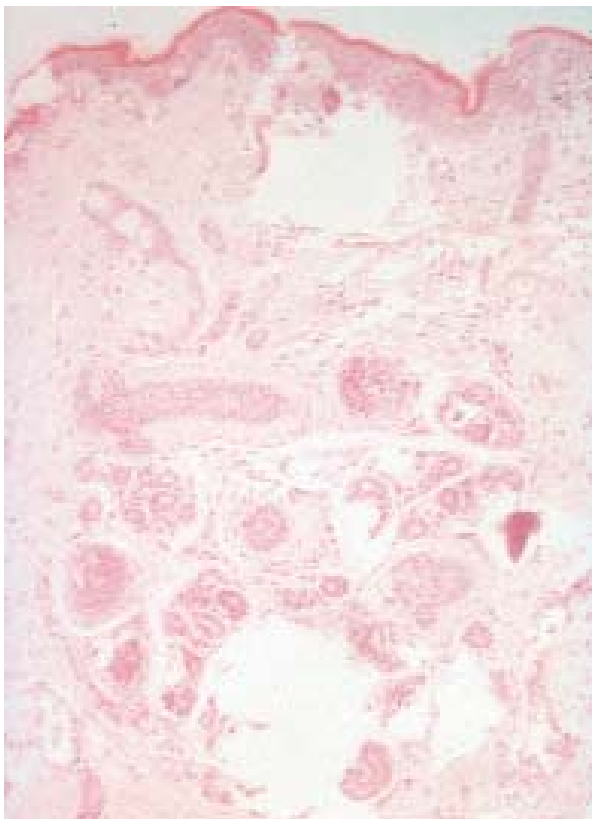


Fig. 2

Fig. 1, 2, 3: Fig. 1 shows a small pedunculated skin lesion near the periareolar region in the first case. Its histological examination (Fig. 2) shows the presence of hair follicles, vestigial sebaceous glands, and eccrine glands (H&E, original magnification 40x). The histological examination of the second case (Fig. 3) shows an infundibulo-follicular cyst (H&E, original magnification 40x).

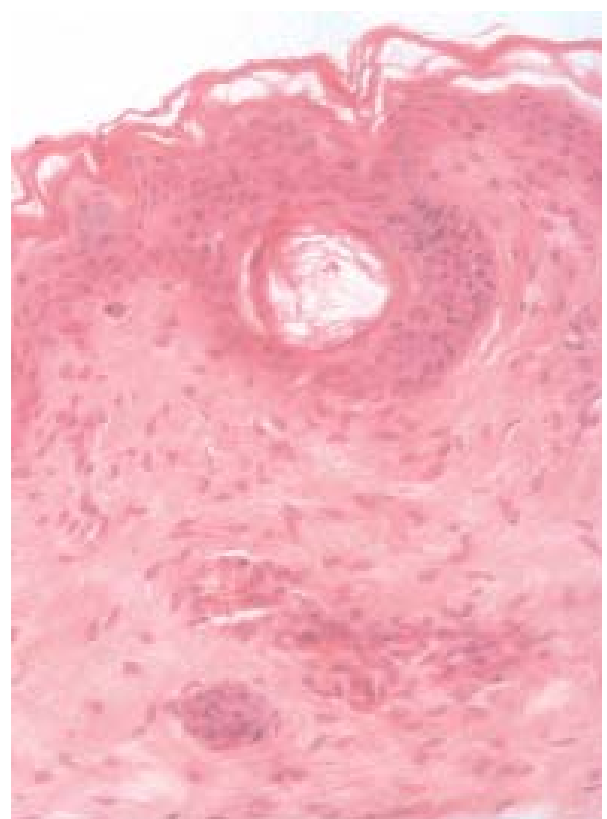


Fig. 3

In a report regarding the statistical prevalence of skin changes in Japanese newborns the incidence of this tumor resulted about 4% in the observed patients. The infants enrolled were 5387 and 220 of these neonates (4.1%) had an adnexal polyp (2). In Czechoslovakia the reported incidence of adnexal polyp is 0.7% (6). Rohr in his report found in 3-day-old infants an incidence of 0.2% of pedunculated lesions in Australia, but did not specify whether the lesions were adnexal polyps or not (5). In this study no hystological examination was performed, so the lesions described as skin tags might have been adnexal polyps of neonatal skin. No data are still available from other countries.

Clinically, adnexal polyp is a skin-colored, firm papule of one millimeter or less. Its surface is often smooth. It can be easily removed by a slight torsion of fingertip to leave minute bleeding. The tumor mostly occurs on the areola of the nipples (1), although an involvement of the scrotal region has been also described (4). This tumor, generally, falls off spontaneously in few days after birth without scar.

Interestingly, longer-lasting adnexal polyps have been also observed. In these reports the persistence of the lesions varied from one month to about one year (1, 3). The sites involved were the breast region and the clinical features matched those of typical adnexal polyp.

The hystological findings, which can be observed in an adnexal polyp, are characterized by the presence, under a normal skin, of adnexal elements localized in the centre of the lesion. Hair follicles, vestigial sebaceous glands, as well as eccrine glands may be observed. There are no smooth muscle fibers of the muscle "arrector pili". An increased number of small vessels may be present, but there is no sign of inflammatory infiltrate (1). In older lesions this hystological pattern may be substituted by the presence of few keratinous cysts with a more or less eosinophilic dermal collagene.

The origin of adnexal polyp is still unclear. It could be considered an organoid hamartoma of syringo-pilo-sebaceous origin (2). The causes responsible for the spontaneous fall off of this lesion are completely unknown. This behavior is not frequent for tumors or hamartomas, justifying the persistence of the term adnexal polyp.

The differential diagnosis of an adnexal polyp should include accessory auricles and supernumerary nipples. It is also important to remember that the presence of multiple small polypoid lesions in a newborn may be the first clinical sign of Gorlin syndrome, an autosomal dominant syndrome characterized by multiple basal cell carcinomas of the skin with a skin tag-like feature, bone cysts of the skull, frontal bossing and intracranial calcification.

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