An unusual benign tumor of pinna – A case report

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Abstract A 12-year-old girl presented to us with a swelling over the lateral surface of the right pinna of 4 years duration. Examination revealed an irregular mass arising from lateral surface of the pinna obscuring the external auditory canal. The lesion was not ulcerated. Wide excision of mass done and sent for Histopathological examination which revealed Tricho folliculoma. This case is being reported as it is a rare skin adnexal tumor arising from an unusual site.

Keywords Tricho folliculoma · Skin adnexal tumor · Hamartoma

Introduction

Tricho folliculoma, the hamartoma of hair follicle tissue, is one of the rare diseases classified by the “office of rare diseases” (ORD) of the National institutes of health. The classical Tricho folliculoma is a highly differentiated follicular tumor within which inner and outer root sheath differentiation are present. The most common site of occurrence is the face or the scalp.

Case report

A 12-year-old girl was brought to our out patient department with complaints of swelling over the lateral surface of right pinna for the past 4 years. The swelling was insidious in onset, started as a pea-sized mass, slowly progressive in nature and attained the present status (Fig. 1). It was not associated with pain or discharge. No history of trauma prior to the onset of swelling. Examination revealed an irregular, pedunculated, (Fig. 2) nodular mass arising from the lateral surface of the pinna, near the cymba concho region obscuring the external auditory canal. There was no warmth or tenderness and the skin over the swelling was normal, rubbery to firm in consistency. Tympanic membrane was intact. Other systemic examinations were normal. No regional lymphadenopathy and there was no other swelling anywhere in the body. Hemotological and biochemical investigations were within normal limit.

Wide excision of mass was done under general Anesthesia and the specimen was sent for Histopathological examination. It was reported as Tricho folliculoma. Photo micrograph (Fig. 3) shows dilated central follicle surrounded by proliferating epithelium showing varying stages of pilar differentiation along with sebaceous differentiation.

Discussion

Tricho folliculoma is an uncommon hamartoma [1] of hair follicle tissue, usually develops on the face or this scalp. The

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Fig. 1 An irregular, pedunculated, nodular mass arising from the lateral surface of the pinna

Fig. 2 The attachment of the mass at the cymba concha region

precise etiology is not known, but it is believed to represent abortive differentiation [2] of pluripotent skin cells toward hair follicles. No definitive racial and sexual predilection is reported. It appears to be primarily a tumor of adults.

Fig. 3 Photo micrograph shows dilated central follicle surrounded by proliferating epithelium

The affected patients usually present with a single, flesh colored or whitish nodule or papule of varying duration, typically on the face or the scalp (most frequently (90%) around the nose). Most lesions do not exceed 25 mm in diameter and usually asymptomatic. Usually these tumor develops spontaneously. Rarely, a prior history of trauma at the tumor site is obtained.

Treatment is by simple surgical excision. The prognosis is excellent. Recurrence is very rare.

Following surgical excision, these tumors are found to consist of a dilated follicle lined by infundibular, stratified squamous epithelium and opening to the skin surface. From the center follicle outward, numerous secondary and tertiary follicles can be observed. Small sebaceous [3] elements may be found within the follicular units. Minimal lymphocytic or granulomatous inflammation may be present. An abundant connective stroma is also present surrounding the follicular structures. Abundant merkel cells have been demonstrated within the follicular epithelium, supporting that Tricho folliculoma are hamartomas.

Differential diagnosis

Trichoepithelioma

It is an uncommon benign condition in which a single or multiple lesion arise on the face after puberty, common in females. The tumor cells form rudimentary hair follicles but do not form actual hair shafts.

Basal cell carcinoma

This is a locally invasive carcinoma of the basal layer of epidermis. It is particularly liable to occur in fair and dry skinned people constantly exposed to sunlight. Elderly people are usually affected.

A variant of the trichofolliculoma is the sebaceous trichofolliculoma, featuring similar histological picture

except for the presence of numerous well differentiated sebaceous lobules emptying into the dilated primary follicle.

Pilar cysts

They are considered biologically benign but it may be locally aggressive. They are more common in middle aged women. A family history of the condition may be present, as the condition may have an autosomal dominant pattern of inheritance.

Conclusion

Skin adnexal tumor in children are quite rare. This case is being reported due to the unusual site of occurrence. Tricho-

folliculoma is an uncommon hamartoma of hair follicle tissue and the treatment is by simple surgical excision.

Acknowledgement I thank Dr. S. Koteswaran, Associate Professor, Dept. of Pathology, MGMC and RI for his help.

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