TRICHILEMMAL CYST: A CASE REPORT AND REVIEW OF LITERATURE

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This is a case report of 12 years old female diagnosed to be trichilemmal cyst in the neck. She underwent total excision of the cyst and there is no recurrence in 5months. We are presenting a short review of literature also.

Keywords: Trichilemmal cyst, Excision, Pilar cyst.

INTRODUCTION:

Trichilemmal cyst arises from a hair follicle and it is also known as 'pilar cyst' or 'isthmus-catagen cyst'. These cysts are almost always benign, malignant transformation being extremely rare.[1] They may be sporadic or may be autosomal dominant.[2] Rarely, these cysts can be multiple and progress rapidly, often called as proliferating trichilemmal cysts. Rarely they can become cancerous with distant metastasis too.[2] Since these arise from the hair follicle 90% of the cases occur in the scalp out of which 30% are solitary and 70% are multiple. They have no racial predilection, usually found in middle aged patients and are more common in women. When they occur in neck region, they have to be differentiated from dermoid cysts, lipomas, thyroglossal cyst, inclusion cysts etc. In this paper we are presenting a patient with Trichilemmal cyst in the midline neck along with thereview of literature.

CASE REPORT:

A 12 years old girl presented to our Paediatric ENT OPD with complains of painless midline anterior neck swelling for the last 6 months. The swelling was insidious onset, painless and slowly progressive. There was no history of upper respiratory tract infection or preceding history of neck trauma. There was no history of similar swelling in the past. The family history of similar swelling was not present.

On examination, she was thin built and her vitals were stable. Her neck examination showed single 3x4cm, firm, non tender, mobile, cystic swelling in the midline of neck. It was present in the midline just below the thyroid notch. The swelling didn't move on deglutition or with protrusion of tongue. There was no other similar swelling palpable in the neck. Her ear, nose, throat and systemic examination were normal. A differential diagnosis of dermoid cyst, thyroglossal cyst, thyroid cyst, epidermal inclusion cyst was made. USG neck was done which suggested benign cystic neck mass. FNAC was done which showed trichilemmal cyst as the diagnosis. The patient was planned for excision of the mass under general anaesthesia. All her preoperative investigations were normal. Total excision of the mass was done. The peroperative finding showed single, well defined, 3x4cm mass in the midline of the neck. It was superficial and lying above the strap muscle in the anterior neck. The mass was excised in total. The cut section of the swelling showed cystic mass containing greyish fluid. The tissue was sent for the histopathological evaluation which showed it to be Trichilemmal cyst. The postoperative period was uneventful. Suture was removed on the 6th postoperative day. She was followed up after 2 and 5 months postoperatively which showed no signs of recurrence.

Fig:1. Surgical excision of the cyst.

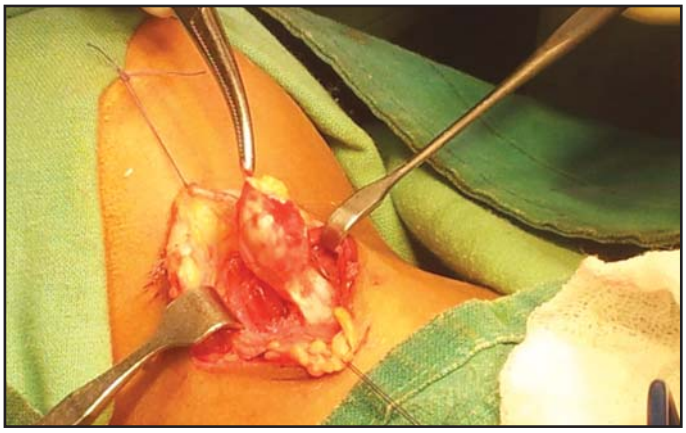
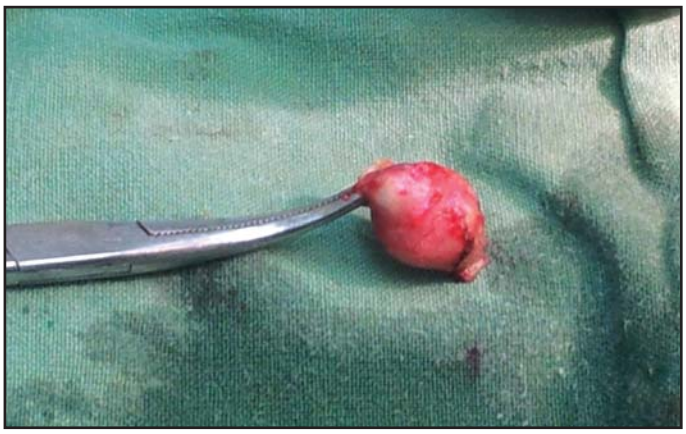


Fig: 2.The gross specimen showing a single, cystic mass



DISCUSSION:

Trichilemmal cyst is a benign, adnexal skin tumour usually occuring in scalp.[1] Hair bearing areas such as neck, trunk, groin are other areas of occurrence. There is a female predominance in this tumour.[1] These tumours are found in 5-10% of the population and these cysts have no racial predilection.

These cysts can occur as sporadic lesions or in hereditary-familial manner with autosomal dominant transmission.[2] Patients suspected to have hereditary predisposition for trichilemmal cyst showed multiple cystic swelling during presentation with early age onset.[2] Our patient had early onset of presentation and had single cystic swelling without any positive family history.

These trichilemmal cysts are derived from the outer root sheath of the hair follicle. They commonly occur in areas of high hair follicle concentrations.[1] 90% of the cases occur on the scalp. 30% of the cases are solitary and 70% are multiple.[1]These cysts are usually benign, non tender and slowly progressive.[1,2] Our patient had a simple, slowly progressive presentation, but rarely these cysts can have varied presentation. The cysts can be tender if they rupture or become infected.[3] Few reports have also presented the immunological features of this process. Upregulation or downregulation of selected cell cycle regulator can activate the inflammatory cells to the intact, unruptured cyst for unknown region. A course of oral antibiotic is indicated in these patients before definitive surgical management.[3] These cysts which are usually slowly progressive can rarely have rapidly progressive variant.[4] These 'proliferating trichilemmal cyst' are rapidly growing large cutaneous cystic swelling occuring on the head and neck region which are managed by excision.

Rarely malignant transformation has been reported in these patients.[5,6] This is usually confused with squamous cell carcinoma as they have many common features. So differentiation between the two is necessary which is done by histopathological evaluation.[6] Till date only 39 cases have reported so far.[7] These patient have rapid progression of the swelling. The management of these cases are controversial due to experience in limited number of patients. Wide surgical excision is the treatment followed so far though different adjuvant modalities have been tried.[8] In our case the patient had presented with midline cystic neck swelling. No other associated symptoms were present. In these cases of benign neck swelling fine needle aspiration cytology has a role as in our case for the diagnosis and its further management.[9] The cytologic diagnosis of a trichilemmal cyst should be made which yield either abundant, blotchy keratin or oily, cholesterol-rich debris with a sparse epithelial component and which lack a mixture of anucleate and nucleate squames. The cytologic diagnosis of trichilemmal cysts is important because these cysts recur if incompletely excised and often undergo transformation to trichilemmal tumors.[10] Our patient underwent total excision of the cyst and there is thus very less chance of recurrence. And follow up at 5 months showed no signs of recurrrence.

CONCLUSION:

Simple trichilemmal cyst though common can have variations like infection, multiple presentation, proliferating lesions or malignant transformation. These cysts need early diagnosis and complete excision for prevention of recurrence.

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