CASE REPORT

Trichilemmal Cyst in the Neck: An Unusual Site

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Abstract

Introduction: Trichilemmal or pilar cysts are common intradermal or subcutaneous cysts that are benign, adnexal skin tumors usually occurring on the scalp. Rarely do these cysts occur in the neck region?

Case history: We report the clinical course and management of a teenage girl who presented with swelling on the left side of the neck for three months duration. She underwent total excision of the cyst. It was diagnosed histopathologically as a trichilemmal cyst.

Conclusion: Trichilemmal cysts are usually found in the hairy region. In this case, the cyst was found below the deep cervical fascia; therefore, it is an unusual presentation and needs to be highlighted.

Keywords: Benign cyst, Neck, Trichilemmal cyst.

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Introduction

The trichilemmal cyst is also known as a pilar cyst or isthmus-catagen cyst. It arises from hair follicles.[1] Trichilemmal cysts are most commonly found on the scalp and are usually diagnosed in middle-aged females.[1] This cyst can be multiple and progress rapidly. Such cysts are called proliferative trichilemmal cysts.[2] Around 90% of these cysts occur in the hair follicle of the scalp. Among these 90%, 30% are solitary and 70% are multiple.[1] As the origin is from a hair follicle, they can be expected to occur in close proximity to or attached to the dermis. Rarely do these cysts occur in the neck region, and they have to be differentiated from the dermoid cyst, lipoma, thyroglossal cyst, or inclusion cyst. We are presenting a case report of a trichilemmal cyst in the neck, along with a review of the literature.

Case Description

A 14-year-old girl presented to the otolaryngology outpatient department with complaints of painless, progressively increasing swelling on the left side of the neck for 3 months. She complained of recurrent attacks of nonproductive, mild-intensity cough. Past history was not of any significance. There was no significant family history. On examination, the patient was of a lean build. Her vitals were stable.

Neck examination showed solitary swelling of size 3 × 3 cm on the left upper lateral aspect of the neck extending from 1 cm below the left angle of the mandible to 5 cm above the left midclavicular line (Fig. 1). Anteriorly, it extended 4 cm lateral from the midline and posteriorly over the lateral border of the sternocleidomastoid. The swelling was cystic in consistency with well-defined regular margins and a smooth surface. Swelling is nonpulsating, nonexpansible, nonreducible, and noncompressible. Swelling becomes less prominent and restricted mobility on making the left sternocleidomastoid muscle taut. Otolaryngological and systemic examinations were normal.

Some of the common swellings seen in the neck, like a dermoid cyst, cold abscess, and epidermal inclusion cyst were ruled out.

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Blood investigations done preoperatively were normal. The mass was totally excised under general anesthesia using a skin crease incision over the swelling. Intraoperative findings showed a single well-defined smooth surfaced whitish mass 3 × 4 × 3 cm mass on the left side of the neck, seen 3 cm below the angle of the mandible (Figs 2A and B). Sutures were removed on the 12th postoperative day. The excised mass was sent for histopathological

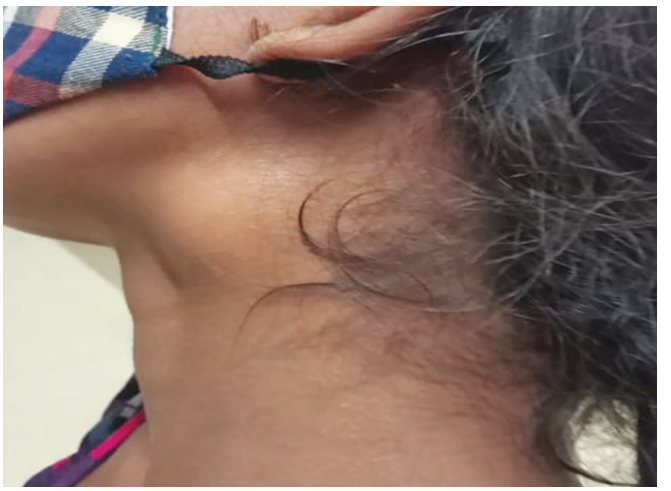
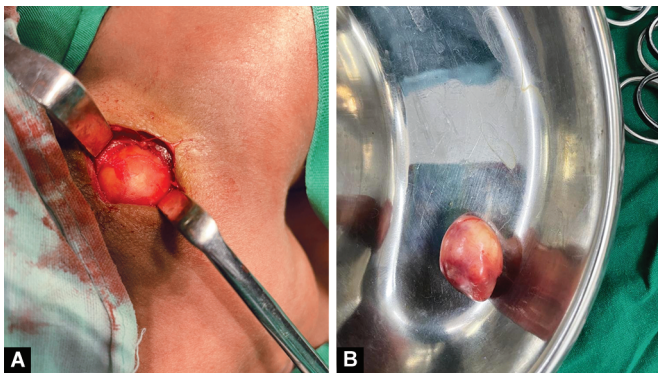
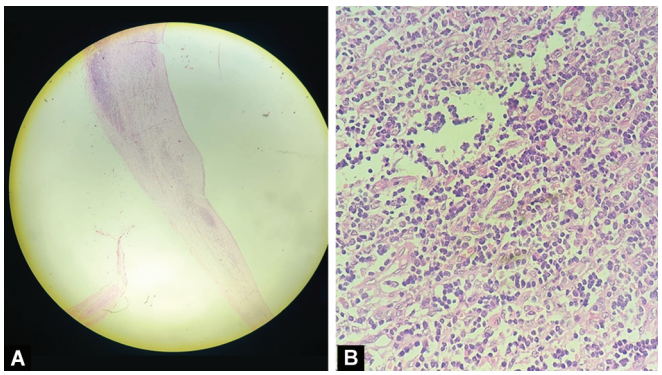


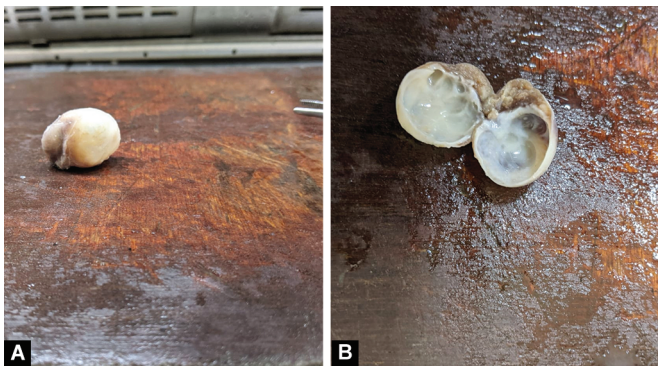
Fig. 1: Showing swelling in the neck



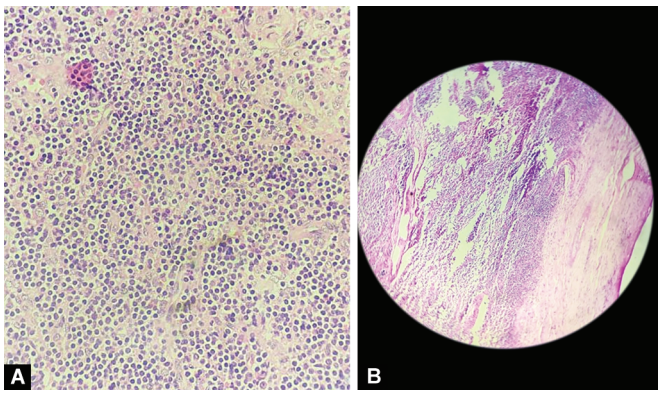
Figs 2A and B: Intraoperative finding and total excision of the cyst



Figs 4A and B: Histopathological examination pictures



Figs 3A and B: Cyst sent for grossing and histopathological examination



Figs 5A and B: Histopathological examination pictures

examination, and the diagnosis of a trichilemmal cyst was confirmed. The cut section of the mass showed greyish fluid (Figs 3A and B). The postoperative period was uneventful. The patient was followed up for 5 months and no signs of recurrence were noted.

Discussion

Trichilemmal cysts are benign, adnexal skin tumors usually occurring on the scalp.[1] They are also called pilar cysts. They may be intradermal or subcutaneous. Hair-bearing areas like the neck, trunk, and groin are the other areas of uncommon occurrence. They may be sporadic or autosomal dominant, usually with female predominance. These tumors are found in 5–10% of the population with no racial predilection.[1] In 2% of the trichilemmal cyst, single or multiple foci of a proliferating cell lead to tumors called a proliferative trichilemmal cyst.[2–4] There, cyst enlarges up to 25 cm with an exophytic nucleus that may ulcerate. In this case, the female patient had single swelling on the left side of the neck which is 3 × 4 × 3 cm.

Patients suspected to have a hereditary predisposition of trichilemmal cyst showed multiple cystic swelling with early age of onset of presentation.[2] Our patient had an early age of onset without any positive family history.

The trichilemmal cysts are derived from the outer root sheath of the hair follicle. They are commonly seen in areas of high hair follicles concentration. Around 90% of the cyst occur on the scalp, 50% are solitary and 70% are multiple.[1] Our patient had a simple, slow, progressive presentation. These cysts are tender and can rupture and get infected. Upregulation or downregulation of the cell cycle can result in an unruptured intact cyst.[3] The proliferating trichilemmal cysts are rapidly growing large cutaneous cystic swellings occurring in the head and neck region that are managed by excision.[4] In our case, the patient presented with cystic neck swelling on the left side. No other associative symptoms were present. In these cases of neck swelling, fine needle aspiration cytology (FNAC) has a role in diagnosis and further management. In our case, the FNAC report has suggested an epidermal inclusion cyst.[5]

But on complete excision and histopathological examination, diagnosis of the cyst showed abundant, blotchy keratin with cholesterol-rich debris and little epithelial component with an anucleate and nucleate squamae.[6–8] The cyst also showed chronic inflammatory cells, granulation tissue, and a cyst wall (Figs 4A and B and 5A and B). This is important because if not completely excised, it may recur and often undergo transformation into a trichilemmal tumor.[7] This patient underwent total excision of the cyst, and a follow-up of 5 months showed no recurrence.

Although in the adnexal region, such cysts are common, these cysts are not seen in the deeper tissues of the neck.[9] With a systematic review of the literature, we could not find previous case reports of cysts in the deep tissues. Therefore, the location in our case is unusual with no relation to the adnexa of the skin.

Conclusion

Trichilemmal cyst, even though common, may present as malignant cyst or infection, and at times their presentation may be delayed. Trichilemmal or pilar cysts are common intradermal or subcutaneous cyst which are benign, adnexal skin tumor usually occurring on the scalp. Other areas which are uncommon can be seen in the neck, gluteal region, and thigh. In this case report, the patient presented with neck swelling, which is present deep in

the cervical fascia. These cysts, therefore, require early detection and complete excision to prevent a recurrence. In this case, the cyst is below the deep cervical fascia; therefore, it is an unusual presentation and needs to be highlighted.

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