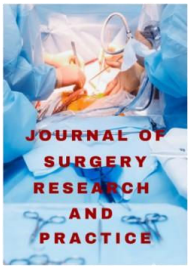

e-ISSN: 3068-3742
Journal of Surgery Research and Practice

ATHENAEUM SCIENTIFIC PUBLISHERS

Case Report

Bilateral Cervical Chondrocutaneous Branchial Remnant: A Rare Case Report

Saket Davera[1*], Karunesh Chand[2], Kamal Kishore[2], Gurjot Singh[3], Badal Parikh[4], Badal Parikh[5]

[1]Department of Surgery, Command Hospital Airforce, Bangalore, India
[2]Department of Paediatric Surgery Army Hospital (R and R), New Delhi, India
[3]Department of Surgery, Army Hospital (R and R), New Delhi, India
[4]Department of Anaesthesia Army Hospital (R and R), New Delhi, India
[5]Department of Pathology Army Hospital (R and R), New Delhi, India

***Correspondence author:** Saket Davera, MCH Paediatric Surgery, Department of Surgery, Command Hospital Airforce, Bangalore, India; Email: Docsac.iaf@gmail.com

Citation: Davera S, et al. Bilateral Cervical Chondrocutaneous Branchial Remnant: A Rare Case Report. J Surg Res Prac. 2025;6(3):1-3.

https://doi.org/10.46889/JSRP.2025.6307

Received Date: 08-10-2025

Accepted Date: 09-11-2025

Published Date: 17-11-2025

Abstract

Cervical Chondrocutaneous Branchial Remnants (CCBRs) are rare congenital choristomas characterized by cartilaginous tissue within the cervical skin. We report a case of a 4-year-old girl presenting with bilateral soft tissue swellings in the lower neck, present since birth. Clinical examination and imaging suggested a congenital branchial remnant. Complete surgical excision was performed and histopathology confirmed hyaline cartilage surrounded by normal adnexal structures. Postoperative recovery was uneventful and no recurrence was noted. Bilateral CCBRs are exceedingly uncommon. Awareness of this entity is essential to differentiate it from other congenital neck masses and to evaluate for associated systemic anomalies.

Keywords: Chondro-cutneous Branchial Remnants (CCBR); Cartilaginous Tissue; Congenital Neck Masses

Introduction

Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis (SJS/TEN) are rare but potentially life-Cervical chondrocutaneous branchial remnants are lesions comprising a cartilage core surrounded by skin with adnexal structures and subcutaneous fat. Diagnosis can be supported by imaging and histopathology. Management includes complete surgical anomaly which presented to a tertiary care health facility.

Case Report

A 4-year-old girl, with an unremarkable antenatal and postnatal history and normal developmental milestones, presented with bilateral soft tissue swellings in the lower third of the neck, present since birth. The swellings gradually enlarged proportionate to the child's growth. There was no history of discharge, recurrent infections of the ear/oral cavity or a relevant family history.

Local examination revealed a non-tender tubular swelling measuring 3 × 1 cm on the left side and a smaller papular lesion on the right, located superior and lateral to the sternocleidomastoid insertion (Fig. 1). Both lesions had heterogeneous consistency with soft and firm components. The overlying skin was intact with no sinuses or discharge. No other cervical abnormalities or systemic congenital anomalies were detected.

Management

A provisional diagnosis of congenital branchial remnant was considered. The patient underwent excision of both lesions. Intraoperatively, the lesions were tubular structures with blind-ending tracts confined to the subcutaneous plane. No deeper

extensions were noted. per-operatively on table sectioning revealed cartilaginous tissue surrounded by adipose elements. Postoperative recovery was uneventful, patient is presently under routine OPD follow-up and is undergoing screening for associated congenital anomalies.

Histopathology

Microscopy demonstrated rod-shaped hyaline cartilage surrounded by normal adnexal structures, without features of atypia or mitosis (Fig. 2).

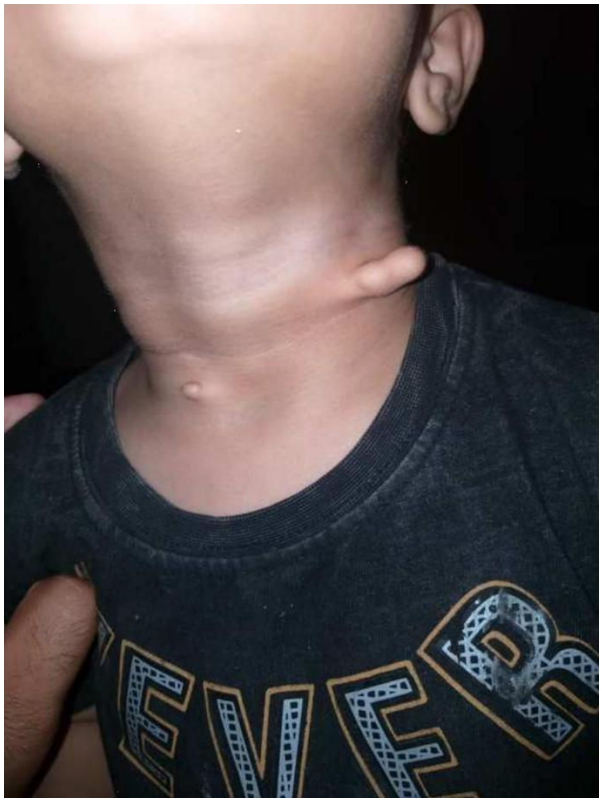

Figure 1: Clinical image of the child.

Figure 2: Photomicrograph of histopathological findings of excised bilateral neck masses. A: Photomicrograph shows a polypoidal lesion line by skin, dermis shows rod shaped mature elastic cartilage with adnexal structures and mature adipose tissue (H and E, 4X); B: High power view of elastic cartilage did not show any atypia or increase in mitosis (H and E stain,20X).

Discussion

Cervical Chondrocutaneous Branchial Remnants (CCBRs) are uncommon benign congenital anomalies classified as choristomas, representing heterotopic cartilage within cervical skin [1-6]. They share similarities with preauricular tags but are rarely found in the lateral neck region. Various terms, including "accessory tragus" "cervical auricle" and "wattle" have been used in literature to describe these lesions. The entity was first documented in 1858 and the largest case series of 17 patients was later reported by Atlan, et al., highlighting a male preponderance [3,7]. The frequency of associated anomalies varies widely across case reports, with cardiac and renal malformations being the most frequently described and ranges between 0-76%. Bilateral CCBRs, such as in our case, are exceedingly rare, with only about ten cases documented till date. The precise embryological origin of cervical chondrocutaneous branchial remnants remains a subject of debate. The most widely accepted hypothesis postulates that these lesions represent vestigial derivatives of the branchial arches most commonly the second or lower arches-arising due to incomplete obliteration of the branchial apparatus. Diagnosis is predominantly clinical; however, imaging modalities may be employed to exclude deeper extensions or associated anomalies, particularly involving the cardiovascular and genitourinary systems. Tamir, et al., advocate surgical excision prior to school age, minimizing operative risks and mitigating potential psychosocial distress [8]. Complete excision is curative, with no documented instances of recurrence or malignant transformation. Histopathological evaluation typically reveals hyaline cartilage, although occasional cases may demonstrate elastic cartilage.

Conclusion

Bilateral cervical chondrocutaneous branchial remnants are a rare presentation of branchial anomalies. They typically present as asymptomatic soft tissue outgrowths without sinus formation. Clinical diagnosis is usually sufficient, though evaluation for associated congenital conditions is recommended. Complete surgical excision is curative and histopathology confirms the diagnosis by demonstrating cartilaginous remnants within dermal tissue.

Conflict of Interest

The authors declare no conflict of interest.

References

1. Pham Dang N, Chevaleyre A, Troude B, Mondié JM, Barthélémy I. Bilateral cervical chondrocutaneous remnants: a familial observation. J Oral Maxillofac Surg. 2013;51(3):e288-90.
2. Begovic N, Simic R, Vlahovic A, Kravljanac D, Djuricic S, Mijovic T. Cervical chondrocutaneous branchial remnants-report of 17 cases. Int J Pediatr Otorhinolaryngol. 2014;78(11):1961-4.
3. Atlan G, Egerszegi EP, Brochu P, Caouette-Laberge L, Bortoluzzi P. Cervical chondrocutaneous branchial remnants. Plast Reconstr Surg. 1997;100(1):32-9.
4. Braun H, Hofmann T, Wolfgruber H, Anderhuber W, Beham A, Stammberger H. Bilateral cervical chondrocutaneous branchial remnants: A case report. Int J Pediatr Otorhinolaryngol. 2003;67(1):89- 92.
5. Nasser HA, Iskandarani F, Berjaoui T, Fleifel S. Bilateral cervical chondrocutaneous remnants: a case report and review of the literature. J Pediatr Surg. 2011;46(5):998-1000.
6. Chander B, Dogra SS, Raina R, Sharma C, Sharma R. Chondrocutaneous branchial remnants or cartilaginous choristoma: Terminology, biological behavior and salience of bilateral cervical lesions. Turk Patoloji Derg. 2014;30(3):195-200.
7. Birkett J. Congenital supernumerary and imperfectly developed auricles on the sides of the neck. Trans Pathol Soc Lond. 1858;9:448.
8. Tamir S, Nidal M, Constantin R, Perez R, Sichel JY. Bilateral cervical chondrocutaneous remnants. Int J Pediatr Otorhinolaryngol Extra. 2008;3(3):117-9.