



BRONCHOGENIC CYST OF THE NECK – A CASE REPORT

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ABSTRACT

- Cervical bronchogenic cysts are rare malformations
- We present a rare case of 19-year-old male with a gradually progressive upper lateral cervical mass.
- He was surgically managed with transcervical excision of the mass.
- Pathology revealed cyst was lined by stratified squamous epithelium and showed moderate lymphomononuclear cell infiltrate and congested blood vessels consistent with bronchogenic cyst.
- To our knowledge, this a rare case of bronchogenic cyst in the upper lateral part of the neck reported in an adult.



Figure 1A Showing pre op image of the swelling in the upper lateral neck and 1B Showing excised mass

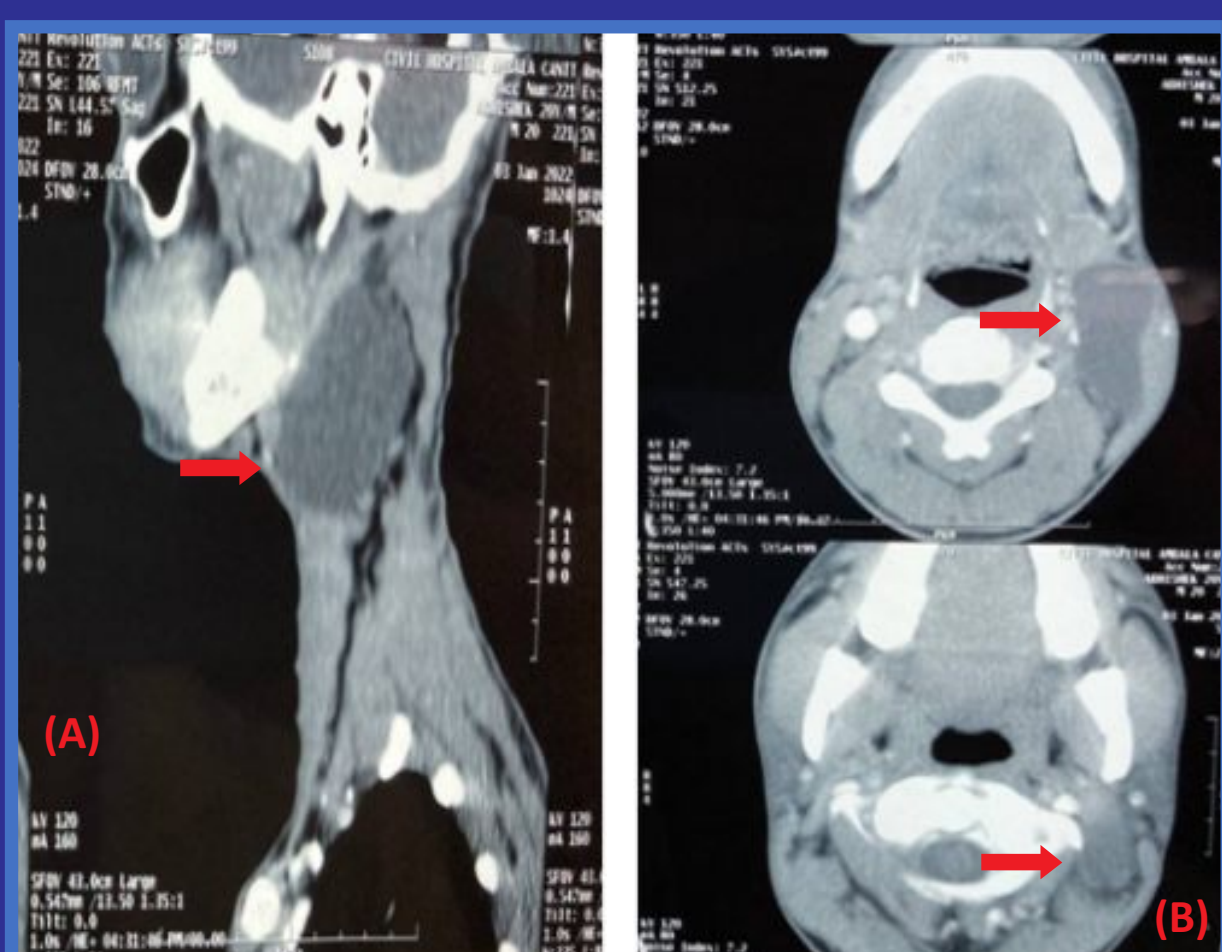


Figure 2 Contrast-enhanced CT neck imaging in saggital (A) and axial view (B) showing well-defined on-enhancing fluid attenuation cystic lesion lateral to the left carotid sheet and deep to the sternocleidomastoid muscle.

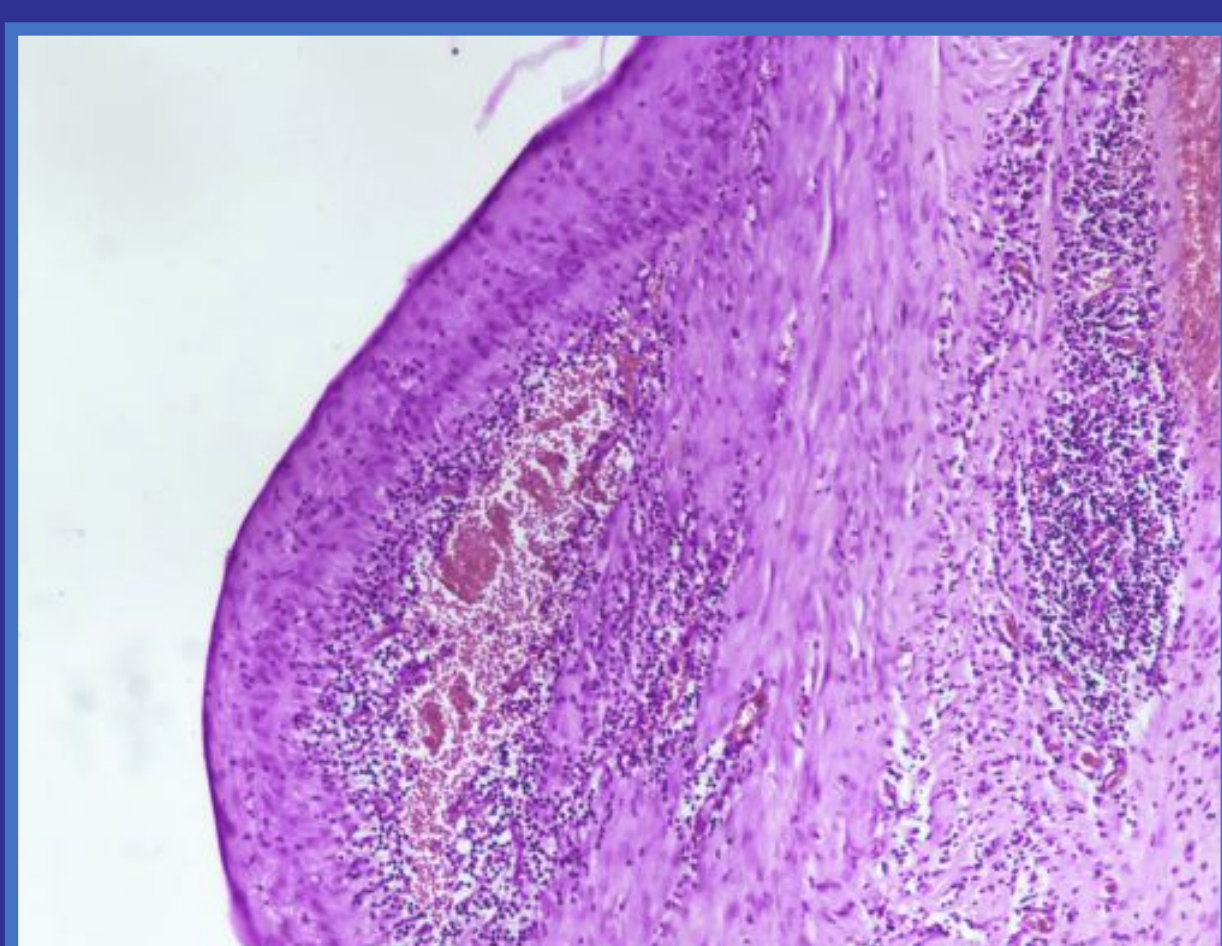


Figure 3 Microscopic image of the cyst showing stratified squamous epithelium

INTRODUCTION

- Bronchogenic cysts are benign congenital lesions that are derived from the primitive foregut.¹
- They are usually found in the mediastinum but their location can be anywhere along the developmental pathway of the foregut in an ectopic site.²
- However, a few cases of infrequent locations have been reported such as the neck.
- We present a case of bronchogenic cyst in the lateral part of the neck, an unusual finding.

CASE REPORT

HISTORY AND PHYSICAL EXAMINATION

- A 19-year-old male presented to our OPD with a painless left-sided neck swelling for 2 years.
 - It was insidious in onset, gradually progressive, and persistent.
 - Upon examination, the swelling was approximately 5 x 5 cm present on the left side of the neck in the lateral aspect.
 - It extended superiorly 2cms below the left ear lobule inferiorly till the level of the hyoid bone, anteriorly behind the angle of the mandible, and posteriorly till the anterior border of the sternocleidomastoid muscle.(figure 1A)
 - It was non-tender, soft, and cystic on palpation.
- The remainder of the head and neck examination was unremarkable.

INVESTIGATIONS

- Ultrasonography showed an oblong well-defined collection with internal echoes and a few septae measuring appx. 56x17mm in the left part of neck lateral to the submandibular gland and anterior to carotid artery.
- Fine needle aspiration cytology was done from the cervical swelling which gave a diagnosis as a benign cystic lesion closest to the branchial cleft cyst.

IMAGING

- A Contrast-enhanced computed tomography neck study showed:
- Well-defined non-enhancing fluid attenuation cystic lesion of 6.4x 4.8 cm lateral to the left carotid sheet and deep to the sternocleidomastoid muscle. (figure 2)

- No evidence of any calcification noted.

SURGICAL MANAGEMENT

- The patient underwent transcervical excision of the left cyst under general anesthesia.

- Intra op findings: Approx.7x5cm smooth dumbbell-shaped cyst was found in the left side of the neck medially adjacent to the carotid artery and internal jugular vein, laterally till the anterior border of the sternocleidomastoid muscle, superiorly till the digastric muscle and inferiorly 4 finger breadth above the clavicle.
- Meticulous dissection was done and the cyst was removed in toto.(figure 1B)
- A negative suction drain was kept and the wound was closed. Post-op. was uneventful.

PATHOLOGY

- The specimen analysis was reported as a bronchogenic cyst.
- On gross examination 5cm, a smooth cyst was seen.
- On cut open, grey-white milky fluid came out.
- On microscopic examination, the cyst was lined by stratified squamous epithelium. The wall of the cyst was fibro collagenic and showed moderate lymphomononuclear cell infiltrate and congested blood vessels.(figure 3)

DISCUSSION

- Bronchogenic cysts in the neck is an uncommon finding.
- Few cases have been reported
 1. U Moz et al reported 2 cases of cervical bronchogenic cyst out of which one case presented with a high cervical lateral mass. They also did a review of the literature and found 14 cases of bronchogenic cyst in the neck out of which 4 cases were in the lateral neck.³
 2. Ines Santos et al reported a case of bronchogenic cyst in the neck in an elder patient. In their review of literature, they found 52 cases of bronchogenic cyst in the neck in adults. Most cases were in the lower neck 44 out of 52, and only 8 were in the upper neck. Half of these 8 cases were in the laterocervical and remaining half midline.⁴

CONCLUSION

- Bronchogenic cysts are a rare malformation with cervical cysts being infrequent reporting.
- We present a case of bronchogenic cyst in the lateral aspect of the neck, and thus bronchogenic cyst should be considered a differential diagnosis in the workup of neck cyst masses.

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