

Case report

Sternal tail: A new entity; A case report

Aymen Ben Ayed^{a,*}, Abdessalem Hentati^a, Slim Charfi^b, Ahmed Ben Ayed^c, Zied Chaari^a,
Imed Frikha^a

^a Department of Thoracic and Cardiovascular Surgery, Habib Bourguiba Hospital, Sfax, Tunisia

^b Department of Anatomopathology, Habib Bourguiba Hospital, Sfax, Tunisia

^c Department of Thoracic Surgery, University Hospital of Gabes, Gabes, Tunisia

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ABSTRACT

Introduction and importance: Supernumerary ribs are very rare. They may occur at any level of the spine. We present here a case of an unusual localization of an extra rib that has not been previously described in the literature.

Case presentation: A 4-year-old girl, with no medical history, presented with a congenital deformity in the sternal region mimicking a tail. The tail-like structure had a bony axis and was covered by normal skin and hairs. A computed tomography of the chest demonstrated that this structure was an abnormal bone articulated with the sternum. For cosmetic purposes, we have decided to resect the malformation. On histopathological examination, it was a supernumerary rib.

Clinical discussion: A review of the literature reveals a global incidence of cervical ribs ranging from 0.04 % up to 4.5 %, intrathoracic ribs in about 50 cases to date and very few reports on supernumerary ribs in the lumbar and sacral region. We were unable to find any similar cases of supernumerary ribs in the sternum.

Conclusion: Supernumerary ribs are rare and benign congenital anomalies. This case report describes an unusual localization of an extra rib in the sternum mimicking a tail.

1. Introduction and importance

Supernumerary ribs are very rare. They may occur at any level of the spine but are most commonly observed in the cervical region. We present here a case of an unusual localization of an extra rib that has not been previously described in the literature. This work has been reported in line with the SCARE criteria (1).

2. Case presentation

A 4-year-old girl, with no medical history, presented with an evident sternal deformity that has been evolving since birth. Physical examination revealed an 8-cm-long excrescence with a bony axis and an implant base measuring 2 cm × 2 cm. This malformation was covered by normal skin with hairs. This structure was mimicking a tail (Fig. 1) and had no voluntary movement. A computed tomography of the chest demonstrated that this structure was an abnormal bone articulated with the anterior face of the sternum, which was bifid. There were no underlying cardiovascular anomalies (Fig. 2). For cosmetic purposes, we

have decided to resect the malformation. The incision was elliptical and the excision of the outgrowth was in an orange peel manner. The bony axis was attached to the sternum through a curved cartilage which has been completely resected. The histopathology of the specimen revealed a supernumerary rib (Fig. 3). The postoperative course was uneventful, and the patient was discharged on the next day.

3. Clinical discussion

Supernumerary ribs are very rare. A review of the literature reveals a global incidence of cervical ribs ranging from 0.04 % up to 4.5 % (2), intrathoracic ribs in about 50 cases to date (3) and very few reports on supernumerary ribs in the lumbar (4) and sacral region (5).

After reviewing the scientific literature that covers supernumerary ribs, we were unable to find any similar cases of supernumerary ribs in the sternum.

* Corresponding author.

E-mail address: aymen_ben_ayed@medecinesfax.org (A.B. Ayed).

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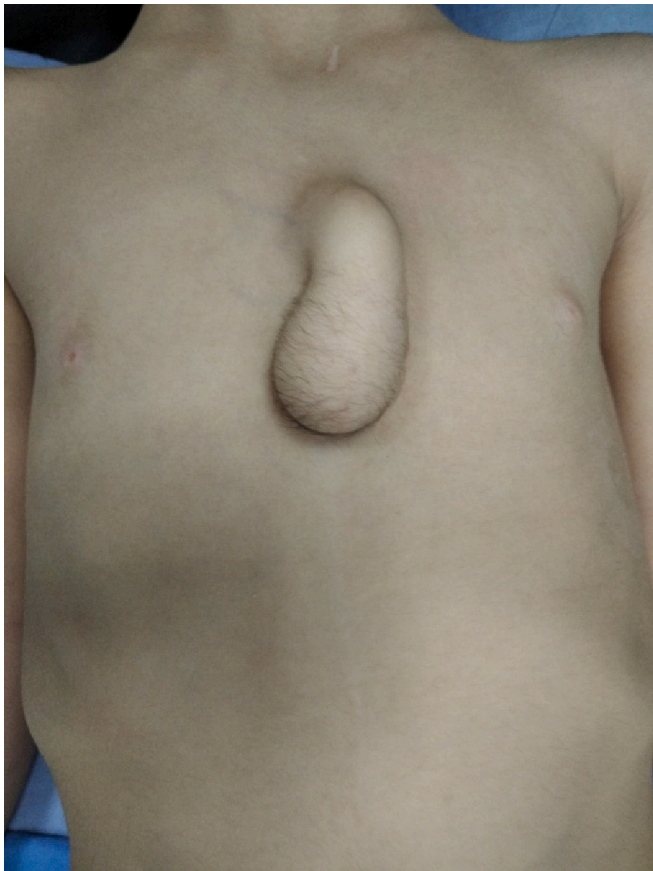


Fig. 1. Pre operative view An unusual sternal malformation mimicking a tail.

4. Conclusion

Supernumerary ribs are rare and benign congenital anomalies usually originating in the vertebral column. This case report describes an unusual localization of an extra rib in the sternum mimicking a tail.

Registration of Research Studies

It is not a first in Man. It is a case report about a rare clinical presentation

Consent

Written informed consent was obtained from the patient's parents/

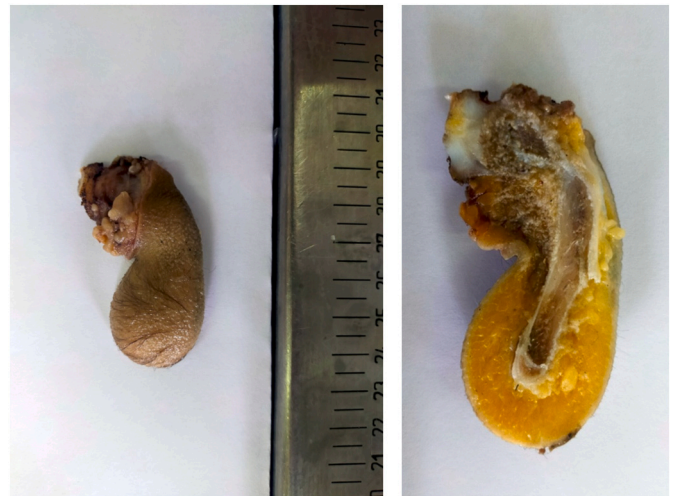


Fig. 3. Macroscopic view of the resected specimen.

legal guardian for publication and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

CRedit authorship contribution statement

- AY.B: conceived the work, contributed to writing, reviewing and finalization of the manuscript
- A.H: contributed to reviewing and finalization of the manuscript
- S.C: contributed to reviewing the manuscript
- AH.B: contributed to writing and finalization of the manuscript
- Z.C: approval of the final version.
- I.F: approval of the final version.

Guarantor

Aymen Ben Ayed.

Ethical approval

Ethics clearance was not necessary. It is a case report describing a rare clinical presentation.

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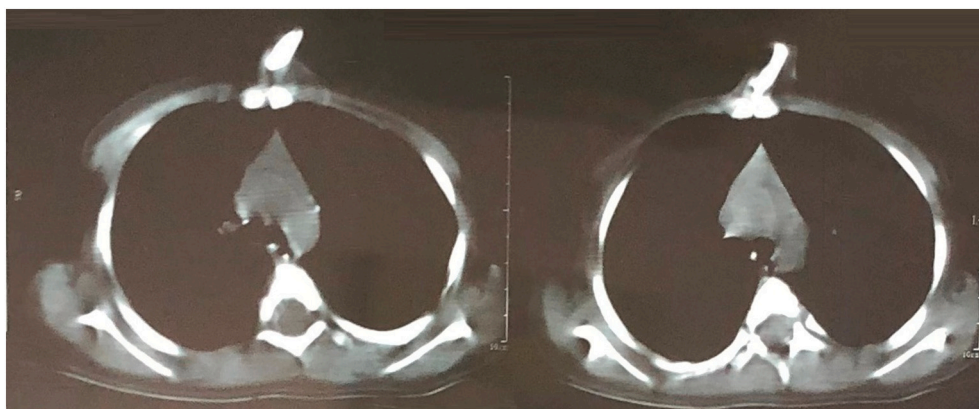


Fig. 2. A computed tomography of the chest showing an abnormal bone articulated with the anterior face of the sternum.

Declaration of competing interest

N/A.

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