



Case Report

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Absent Thoracic Rib

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To Cite This Article: Najia Al Hojaili, Sami Najjar, Attia Al Zahrani, Alaa Najjar, Liyla Al Abassi, et al., Absent Thoracic Rib. 2020 - 8(5). AJBSR. MS.ID.001310. DOI: [10.34297/AJBSR.2020.08.001310](https://doi.org/10.34297/AJBSR.2020.08.001310).

Received: 📅 April 01, 2020; **Published:** 📅 April 29, 2020

Introduction

Congenital absence of the ribs is relatively rare, and absence of the superior anterior ribs has not yet been Documented [1,2]. we report a full-term Chinese male infant born with the absence of the superior anterior 2nd and 4th ribs on the left side without notable dyspnea. Asymptomatic single rib absence is managed conservatively but for absence of multiple ribs, surgical repair is required, in our unit reported again Preterm 34 weeks with absent 2nd, 3rd and 4th left thoracic ribs without dysmorphic feature admitted in the NICU with respiratory distress, the congenital arrest in the development of the ribs is more frequent than the arrest of formation or the complete absence of the ribs. The arrest of development is generally manifested at the costal cartilages and the anterior parts of the ribs. It does not occur at any constant level. The defect is generally unilateral, and the first rib is usually unaffected.

Incidence

The overall risk is 8-15%, with 30-50% of perinatal fatalities related to major congenital malformations.

Case History

Full term delivered by Ciceran -section due to fetal distress, Apgar score 8.9 at 1and 5 minute. Mother is diabetic on insulin no history of UTI, no history of high blood pressure, baby shifted to NICU because he was tachypnea.

On Examination

Vital signs TEMPRETURE=37C RR=70PPM HR:150ppm weight =1.6 kg, no dysmorphic feature. Tachypnea but good air entry bilateral had chest deformity in form of depression or curve in upper part of right chest. 1st and 2nd heart sound normal no murmur, Soft abdomen no organomegaly, Normal tone and reflexes

Investigation:

1. CBC Normal
2. Chemistry within normal
3. Blood group O⁺, Echo cardiogram was normal
4. Chest x-ray show absent 2nd, 3rd 4th left thoracic ribs
5. CT Chest show absent left upper 3rd and 4th right ribs. Fused posterior part of left 5th and 6th ribs, butterfly vertebra. Fused left posterior nural of thoracic 3rd and 4th and thoracic 5th.

Differential Diagnosis

1. Respiratory distress
2. Transient tachypnea of neonate
3. Sepsis



4. To rule out vactral anomalies (Figure 1 & 2)

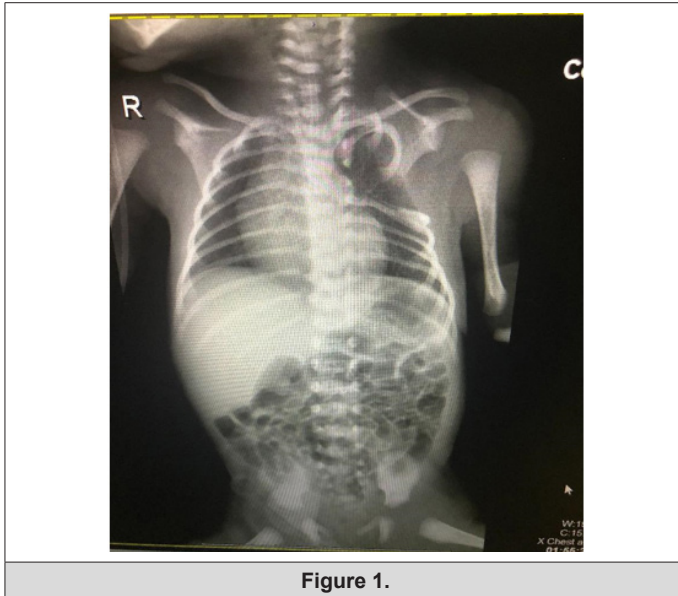


Figure 1.

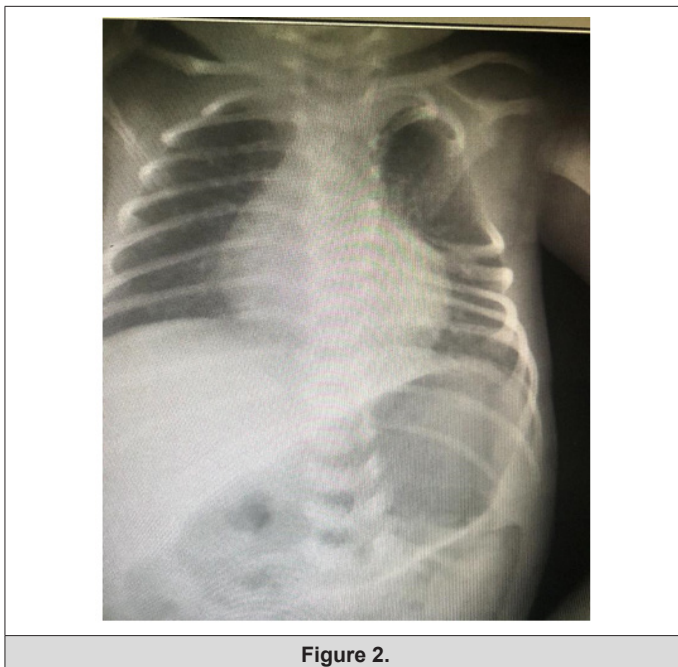


Figure 2.

Course and Prognosis

Baby admitted in the unite as respiratory distress to rule out sepsis on nasal cannula and started ampicillin and gentamycin. OGT Inserted and its passed to roll out VACTRAL anomalies not saw by by pulmonologist to assist pulmonary function and orthopedic consultation was sent.

Discussion

Congenital rib absence is a rare disease without ascertained etiology. Local blood supply insufficiency might result in rib dysplasia during the embryonic period [3,4].

Conclusion

The absence of the entire ribcage has been reported in few studies, while no study has reported the absence of multiple superior anterior continuous ribs. In our case, the neonate did not present with any specific complications such as secondary tachypnea, dyspnea, hypercarbia, or poor blood ejection ability of the heart. We recommend 3D-CT reconstruction as an effective complementary tool to confirm the absence of multiple ribs which was confirmed.

Conflicts of Interest

No conflicts

References

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