

## **Congenital Lobar Emphysema-Report of 5 Cases in the Children's Hospital of Damascus, Syria**

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### **Abstract**

Congenital lobar emphysema (CLE) is an uncommon cause of infantile respiratory distress with a prevalence of 1 in 20,000 to 1 in 30,000.

**Keywords:** *Congenital Lobar Emphysema (CLE); Children's Hospital; Damascus; Syria*

### **Introduction**

It is diagnosed on the basis of evidence of lobar over aeration, mediastinal shift, and compression of the adjacent lobe. The aim of this report is to determine clinical characteristics of Congenital lobar emphysema (CLE) at Children's Hospital of Damascus.

### **Case Report**

5 Cases of CLE managed between April the 1<sup>st</sup> 2016 until January the 31<sup>st</sup> 2019 were reviewed.

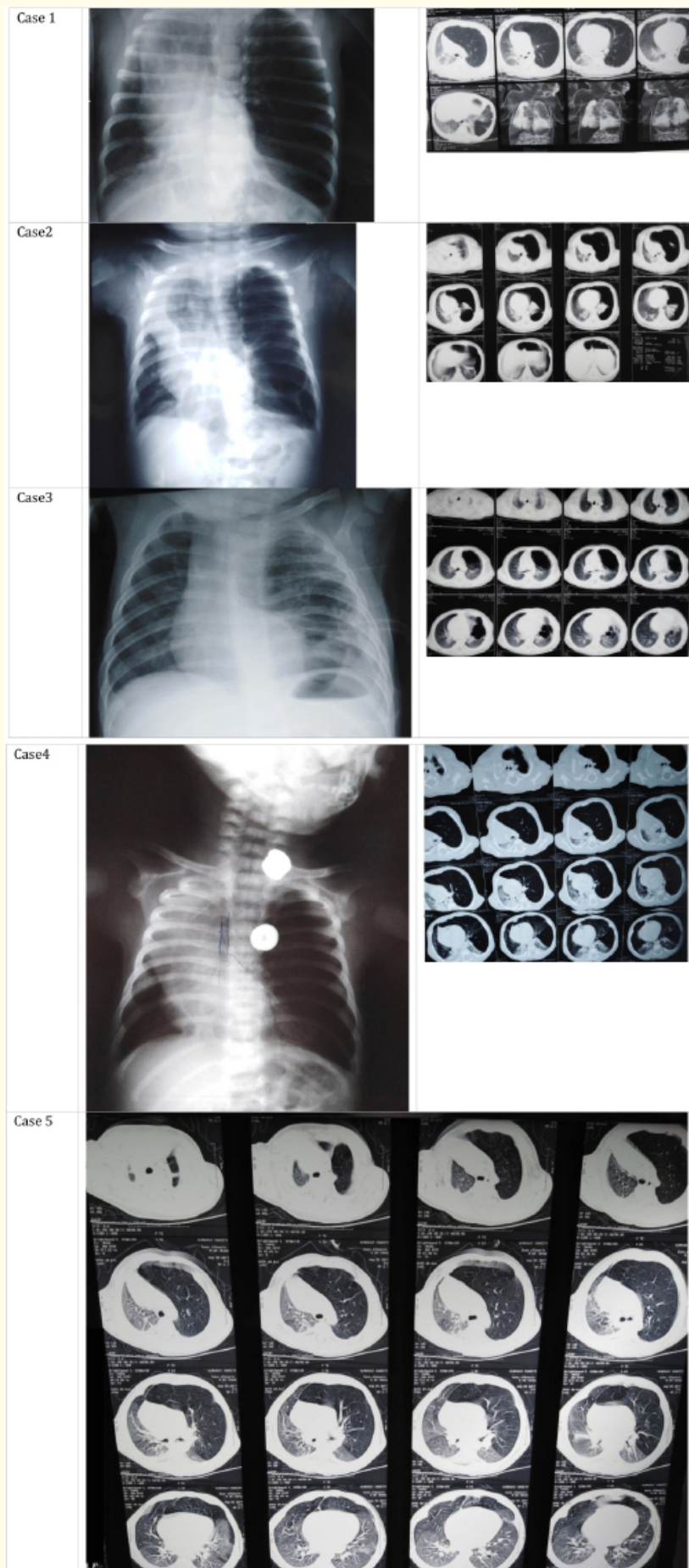
### **Results**

We report 5 CLE. They were 4 males and 1 female. The mean age at diagnosis was (2,3 months). Symptoms were: progressive respiratory distress (n = 5) recurrent attacks of dyspnea (n = 4); pulmonary infection (n = 1). Chest X ray and CT scans showed hyper aeration of the affected lobes (Figure 1).

Histopathological analysis revealed lobar emphysema.

The affected sites were left upper lobe (n = 3, 60%), left lower lobe (n = 1, 20%) and right upper lobe (n = 1, 20%).

CLE was no associated to congenital cardiac anomalies. All patients underwent lobectomy. Post-operative course was uneventful in 4 children, One patient died.



## **Discussion and Conclusion**

Congenital lobar emphysema is a rare disease in children, we should suspect the diagnosis in progressive respiratory distress with or without cardiac anomaly, the corner of diagnosis is the hyper aeration of affected lobe, the gold standard of management is lobectomy with good prognosis in most cases [1,2].

Lobectomy is the treatment for nearly all cases of CLE with respiratory distress. According to Karnak, *et al.* [3] lobectomy is the recommended treatment for CLE in all infants under two months of age and in older infants who present with severe respiratory symptoms. Apparently, the earlier the presentation is, the greater is the need for surgery.

Conservative management, with close outpatient follow-up, can be used in older children who present with mild to moderate symptoms.

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