



A Case of Congenital Oesophago – Bronchial Fistula at Birth

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Introduction

Tracheo/bronchoesophageal fistula may be congenital, traumatic, inflammatory, or neoplastic. Most patients with congenital tracheoesophageal fistulas (TEF) are diagnosed immediately following birth or during infancy, because more than 98 % are associated with atresia of the oesophagus [1]. Congenital TEF without oesophageal atresia H type TEF is rare but reportedly detected in adults because of long-standing respiratory symptoms [1–7]. Symptoms sometimes present during childhood or adulthood but are seldom seen at birth [1, 5–7]. Here we are reporting a case of congenital oesophagobronchial fistula which was detected in the neonatal period and operated immediately.

Case Presentation

A late preterm newborn male baby born to a 34 year old G3A1E1 mother with Gestational Diabetes Mellitus, Hypothyroidism, Pregnancy induced hypertension and Polyhydramnios. Antenatal scans detected midline stomach. Baby born by elective LSCS with a birth weight of 2.8kg, cried at birth. He developed respiratory distress at 1 hour of life. Initial Chest X ray was suggesting RDS picture and started on CPAP and tube feeds. However he was not improving on Day 3 and repeated X ray showed clearance of RDS but left lower lobe consolidation. CRP was rising hence treated as congenital pneumonia with IV antibiotics, Piptaz and Amikacin. He had persisting respiratory distress with rising CRP on Day 5, hence upgraded antibiotics to Meropenem and Vancomycin. ECHO done has shown small ASD and PDA. Repeated Chest X ray on Day 6 showed persistent left lung consolidation and CT scan lungs also detected the same. Hence antibiotics were continued for 3 more days. As there was no clinical improvement on Day 10 Upper GI contrast study was performed which demonstrated an oesophago-bronchial fistula between the lower oesophagus and left lower lobe of the lung. Feeds were stopped and the baby showed improvement within 24 hours. Paediatric surgeon was consulted and fistulectomy with lobectomy of the left lower lobe of lung was performed on Day 15. Post surgery fluoroscopy showed no fistula or leakage. Baby was discharged after 4 days on breastfeeding and is gaining weight well at follow up visits.



Fig. 1: Chest X ray on D1 - RDS picture



Fig. 2: Chest X ray on D3 - Left lower lobe consolidation



Fig. 3: UGI contrast - Oesophagobronchial fistula **Fig. 4:** Fluoroscopy post-surgery No fistula or leakage

Discussion

Congenital Oesophagobronchial fistula is a rare presentation at birth. It can be classified as type IV TEF variation as it's not exactly H-type TEF. The difference is H-type fistulas are usually seen in adults with long standing respiratory symptoms but oesophagobronchial fistula can present in neonatal period or infancy. OBF can mimic congenital pneumonia with lung consolidation however it can be recurrent or unresolving and not responding to antibiotics. Upper GI contrast study is the best modality to detect this type of OBF. Treatment includes fistulectomy and lobectomy of the involved lung lobe.

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