Late Repair of Type C Tracheoesophageal Fistula May Have Successful Outcome

Dear Editor,

Late presentation of type C tracheoesophageal fistula (TEF) may be due to many reasons such as delayed diagnosis, non-supervised delivery, lack of medical attention immediately after birth and recent ongoing pandemic COVID-19. Usually, these late repair can have full blown sepsis, severe pneumonia and dyselectrolytaemia with nutritional overlay. We report the case of type C TEF who presented late, was operated and managed postoperatively respiratory support and had a successful outcome.

A 15-day-old male child was brought to the emergency department with a history of drooling of saliva with regurgitation of feed and respiratory distress since birth. He was a term baby delivered by normal vaginal route at a private hospital with birth weight of 2.2 kg. He had feeding difficulty and respiratory distress from the second day of life. Initially, the child was evaluated at local hospital in view of respiratory distress. At the 13th day of life, a paediatrician suspected oesophageal atresia (EA) and confirmed it by a upper gastrointestinal contrast study [Figure 1]. The patient reported to us on day 15 of life. On examination, the baby was active, afebrile, had mild respiratory distress and weight 1.9 kg. The baby gram showed right upper lobe haziness with gaseous abdomen. After resuscitation, the child underwent right extra pleural open posterolateral thoracotomy with primary repair. On exploration, the gap between the upper pouch and lower oesophageal fistula was 1.5 cm with narrow fistulous opening of lower esophageal pouch with trachea just above the carina and right side aortic arch. Postsurgery, child was kept on mechanical ventilator for 5 days and nasogastric feed started on postoperative day 5. The patient was on gentle chest physiotherapy and domperidone drops were advised as prokinetic drug. Total parenteral nutrition in the form of amino acids and albumin was given to improve nutritional status. The baby recovered well and was discharged 12 days later. At 1-month follow-up, child was tolerating feed with no history of regurgitation.



Figure 1: Preoperative upper gastrointestinal contrast study showing blind ending upper pouch (red arrow)

Delayed diagnosis of EA with TEF is a common problem in our country. Delay in the diagnosis is associated with a bad prognosis.[1] The limiting factors in the survival of type C TEF are prematurity, sepsis, pneumonia, congenital heart disease (CHD) and associated anomaly. Only few cases of oesophageal atresia with TEF have been successfully treated if they first present in the 3rd week of life.[2-4] Diagnostic delay can be avoided in case of suspecting TEF with a history of drooling of saliva from mouth, chocking or transient cyanosis, feeding difficulties and respiratory distress.[5] Antenatal ultrasonography findings of polyhydramnios also suggest an underlying EA. In all babies with a history of polyhydramnios, a nasogastric tube insertion is essential to exclude EA.[6]

Here, we treated a case who reported late, had compatible CHD (right aortic arch), small pneumonic changes and early sepsis. The reason for having less morbidity is due to the fact that fistula connection was usually narrow in this case leading to less regurgitation of chemical fluid from the stomach to the lung and less risk of chemical pneumonitis.

To conclude, late cases of EA with TEF may have a successful outcome with optimal care and post-operative respiratory support, if needed.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the legal parents have given his consent for images and other clinical information to be reported in the journal. The parents understands that names and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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