Tracheoesophageal Atresia and Fistula: A Case of Mistaken Identity?

Hind Zaidan, MBBS* Ahmed Majdi Khalifa, MBBCh** Isa Y Ali Hasan, MBBS, FAAP, FRCP (I), MSc***
Martin Corbally, FRCSEd, FRCS, MRCPI (Assoc)****

Tracheoesophageal atresia with or without fistula presents shortly after birth with difficulty in swallowing saliva, history of polyhydramnios and failure to pass a nasogastric tube which coils in the proximal blind ending esophagus. Early thoracotomy and primary anastomosis within a few hours of birth have produced a significant survival result; mortality is associated with coexisting serious cardiac disease, late diagnosis and presentation. The majority of patients have a fistula which could result in significant pulmonary contamination with saliva (or food) if the abnormal connection is not urgently ligated.

We report a case of a neonate referred at three days of age where the nasogastric tube (NGT) had not coiled proximally as expected; the tube initially extended vertically to the level of the diaphragm, giving the impression of an intact esophagus. The neonate subsequently underwent primary repair of the atresia with fistula ligation. At five-months post-discharge follow-up, the patient was thriving and well.

Bahrain Med Bull 2016; 38 (2): 119 - 121

THE CASE

A case of a full-term neonate showed signs of respiratory distress and excessive oral secretions shortly after birth. The patient was saturating well on room air. A nasogastric tube (NGT) was inserted, which passed easily. A chest X-ray revealed that the NGT had reached the level of the diaphragm; therefore, it was reasonably interpreted as an intact esophagus, excluding an atresia, see figure 1. However, there was a high suspicion that the NGT was not in the right place as the course of the tube was unusual; thus, a confirmation X-ray was performed after reinsertion of another NGT, see figure 2.

Figure 1: Unusual Placement of Nasogastric Tube

Esophageal atresia (OA) with tracheoesophageal fistula (TEF) is a major congenital anomaly that occurs in approximately every 3,500 live births.1 It is classified according to the anatomical location and the presence or absence of the fistula between the trachea and oesophagus2. Early diagnosis of an atresia and fistula is crucial in the management and prognosis and is aided by coiling of a nasogastric tube (NGT) in the proximal pouch. The presence of gas in the stomach and intestine indicates a fistula from the distal esophagus to the airway. Infants with OA are usually symptomatic immediately after birth and present with excessive secretions that cause drooling, respiratory distress and feeding difficulty.

Early diagnosis, prompt ligation of the fistula and primary anastomosis are essential to the management and have resulted in more than 90% survival rate1. Survival is determined by the presence or absence of serious associated cardiac lesions; morbidity is often determined by the presence or absence of pneumonia secondary to late presentation and aspiration of saliva or food from the esophagus through the fistula and into the lung. Developing countries have higher morbidities, not only due to delayed presentation and management, but also due to poor resources in intensive neonatal care3,4.

The aim of this case is to report an unusual presentation of tracheoesophageal atresia with fistula.