

Double Fistulae in Esophageal Atresia

We managed two patients of esophageal atresia with double fistulae, rarely reported in Indian literature(1). At thoracotomy, the upper pouch was not dilated in the first baby and resistance of the anesthetic bag did not change after ligation of distal fistula. An upper pouch fistula was encountered during mobilization, which was ligated and divided followed by an end-to-end anastomosis of the esophagus. The second baby was operated for esophageal atresia and distal tracheoesophageal fistula in the newborn period. He was brought to us at 2 month of age with recurrent episodes of cyanosis on feeding and cough. Contrast esophagogram and bronchoscopy revealed a tracheoesophageal fistula proximal to the original site of fistula. The fistula was located in the neck and was ligated and divided through neck incision successfully.

Incidence of double fistula is less than 1 % of all tracheoesophageal fistula(2,3). The existence of upper pouch fistula is underestimated because routine upper pouch contrast studies and preoperative bronchoscopies are not done by most practicing Pediatric surgeons. Some are initially missed and later picked up and thought to be recurrent tracheoesophageal fistulas, Post-mortem diagnosis of missed upper pouch fistula is also reported(2).

Workup for missed upper pouch fistulas is recommended in babies who choke during feeds postoperatively and have recurrent pneumonia. They can be differentiated from recurrent tracheoesophageal fistula by bronchoscopy. During surgery a careful mobilization of upper pouch from underlying trachea must be done in every case to rule out an upper pouch fistula(4). Routine preoperative bronchoscopy and upper pouch dye studies will certainly reduce the chances of a missed upper pouch fistula.

**P.K. Tripathy,
K.L. Narasimhan,**

*Department of Pediatric Surgery,
P.G.I.M.E.R., Chandigarh, India.*

E-mail: narasimhankannan@hotmail.com

REFERENCES

1. Sharma GK, Thapa BR, Mitra SK, Mehta S. Esophageal atresia with double tracheoesophageal fistula. *Indian Pediatr* 1989, 26: 497-499.
2. Johnson AM, Rodgers BM, Alford B, Minor GR, Shaw A. Esophageal atresia with double fistula: The missed anomaly. *Ann Thorac Surg* 1984, 38: 195-200.
3. Islam S, Cavangaugh E, Honeke R, Ronald B. Diagnosis of a Proximal tracheoesophageal fistula using three-dimensional CT scan: A case report. *J Pediatr Surg* 2004, 31: 100-102.
4. Nawaz A, Jacobsz A, Ahmed H. An unusual case of esophageal atresia and double distal tracheoesophageal fistula. *J Pediatr Surg* 1998, 33: 1443-1445.