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Case Report – Late Presentation of Congenital H – Type Tracheooesophageal Fistula

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Abstract: *H - type tracheo oesophageal fistula is a rare congenital anomaly that is mainly diagnosed in the neonatal age. H -type isolated tracheo oesophageal fistula presents with a characteristic triad of symptoms : chocking and cyanosis on feeeding, recurrent lower respiratory tract infection and abdominal distension. Symptoms may be intermittent and vary in severity. A high index of suspicion is required because the symptoms are not specific. Preoperative diagnosis and locating it at surgery are both difficult. Surgical division of the fistula is curative . We here reporting a case of h - type tracheo oesophageal fistula which is very rare.*

Key words: *H type fistula, Tracheo oesophageal fistula, TOF*

I. Introduction

H type tracheo oesophageal fistula account for 4.5% of all congenital tracheo oesophageal malformation.[1] The symptoms are nonspecific but common one being the recurrent respiratory symptoms, aspiration, cyanosis abdominal distension. Later presentation of tracheo oesophageal fistula in childhood are uncommon. These are usually diagnosed in the neonatal period. Persistent in childhood, usually present as either chronic or recurrent lung disease. Early diagnosis and adequet operative management avoid undue morbidity and mortality.

II. Case report

A 1 and 1/2 year old male child presented to us with complains of cough and vomitting with liquid food since birth. Patient investigated, TLC was 14600/cumm, chest x-ray examination showed mild right upper zone pneumonitis. Oesophagogram was normal. UGI endoscopy revealed that there is a fistulous tract from upper oesophagus. He was operated through a right supraclavicular approach. Fistula was ligated and divided. Dye study performed on 7th postoperative day which was normal. Orally started and postoperative recovery was uneventful. Patient discharged on 10th postoperative day.

III. Discussion

H type tracheo oesophageal fistula is a rare congenital anomaly with an incidence of about 1 in 100000 live births. In view of such low incidence, there are not many reported cases or much sceintific literature about the treatment, diagnosis and prognosis of this anomaly. 70% of H type tracheooesophageal fistula are at or above the 2nd thoracic vertebra and they can be as high as C7 and as low as T4.[2]

unlike EA with TEF, the early diagnosis of H type tracheo oesophageal fistula is sometimes difficult to diagnose and delayed, so some cases may remain undiagnosed until late in infancy and even adulthood.[3] H type tracheo oesophageal fistula is associated with other malformation in about 30% of cases including VACTERAL/VATER, CHARGE SYNDROME, congenital oesophageal stenosis, Goldenhars syndrome and syndactyly.[3, 4] our case has none of these association.

many diagnostic method have been advocated for diagnosis of H type fistulae. Prone oesophagogram is usually a reliable method to identify congenital H type fistula, though often difficult requiring multiple attempts before the defect is confirmed. Endoscopy methods like bronchoscopy and oesophagoscopy have the advantage of being diagnostic and allowing placement of catheter arround the fistula to assist its localization during surgery.

Different surgical approach have been discussed for this anomaly.[5] for proximally located fistula choise is cervicotomy and in case of distal fistula; thoracotomy is the choise of approach. Alternative thoracoscopic approach has been recently reported by allal et al. Our case has proximally located fistula so cervical approach used.

Both surgical and endoscopic management of the condition have been described. Endoscopic management using fibrin occlusion, sclerosation, elecrucautry, laser coagulation has a lower morbidity and mortalityrate compared to the surgical approach,[6] but is associated with high recurrence rate so, the surgery remains the mainstay treatment of the H type tracheo oesophageal fistula. For surgical correction any of the these approaches could be used, lateral cervical, anterior cervical and trans thoracic. Many surgeons nowdays recommended preoperative or intra operative bronchoscopic guidewire (vascular, fogarthy, ueretral catheter) transfistula placement to locate fistula on a chest roentgenogram and to palpate fistula intra operatively.

IV. Conclusion

A high index of suspicion of H type fistula should be raised any any case of chronic and recurrent lung disease which is not managed by medical treatment until prove otherwise. Such patient should be thoroughly investigated to rule out H type fistula and treated appropriatly to avoid undue morbidity and mortality.

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Figure legend :
1. Endoscopic photo of H type tracheo oesophageal fistula
2. Photo showing localization of fistula, sling hold it.
3. Photo showing ligation of fistula and repair the defect in oessophageal lumen and tracheal lumen.

Fig-1

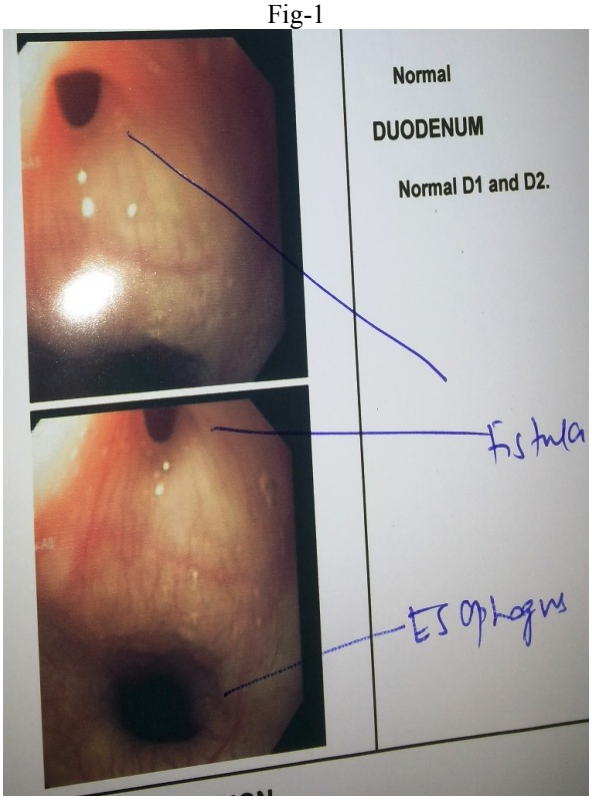

Fig-2

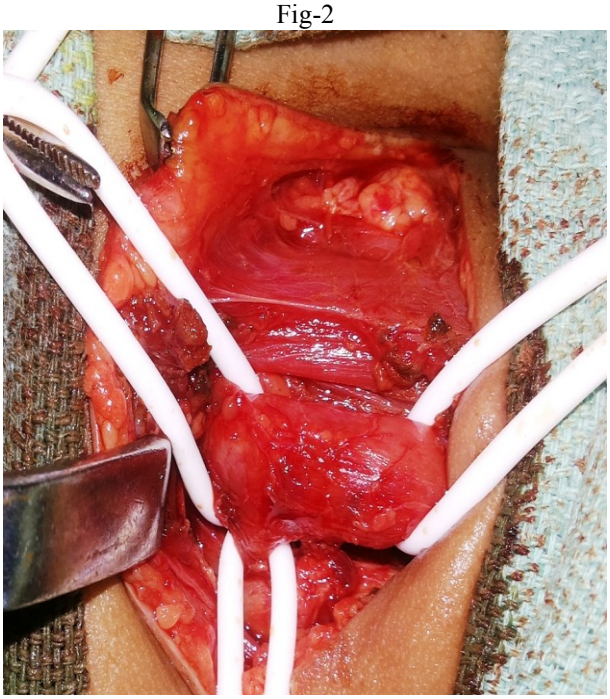

Fig-3