

DELAYED PRIMARY REPAIR WITH NATIVE ESOPHAGUS IN LONG GAP ESOPHAGEAL ATRESIA, DEFINITELY WORTH THE WAIT!



N.Syikin Yahya¹,M.Fauzi Sharudin¹,A.Krishnan¹,Q.Soong Yuen¹,N.Ramli¹,L.Quincy¹,Z.Zahari²

¹Paediatric Surgery Unit,Department of Surgery,Hospital Sultanah Aminah,Johor Bahru

²Paediatric Surgery Department,Hospital Tunku Azizah Kuala Lumpur

INTRODUCTION

Repair of long gap esophageal atresia represents a challenge. Delayed primary repair ideally achieved within three to six months of age. We describe a case of long gap esophageal atresia managed successfully using native esophagus at 11 months old.

CASE REPORT

One year old preterm girl delivered at 36 weeks of gestation with birth weight of 2.19kg, had pure esophageal atresia with duodenal atresia who underwent laparotomy, gastrostomy and duodenoduodenostomy at day one of life. Gap assessment done at three months noted more than four vertebral bodies distance between proximal to distal pouch. Right thoracotomy was performed 6 weeks later and decided for end esophagostomy in view of long gap esophageal atresia with underdeveloped both esophageal end. Colonic transposition was planned 7 months later. Nutrition optimised preoperatively. Intraoperatively noted good length of lower esophageal pouch which amenable for primary esophageal anastomosis. Good perfusion of esophagus post repair. Post operatively child nursed in Paediatric Intensive Care Unit,ventilated on high frequency oscillatory ventilation (HFOV) for five days and extubated post op day eight.Upper gastrointestinal (UGI) contrast done post op day nine showed no fluoroscopic evidence of anastomotic leak. Feeding started day 10 postoperatively and fully established oral feeding on post op day 15.



Figure 1 : lower esophageal pouch

Figure 2 : upper and lower esophageal pouch anastomosis with transanastomotic tube.

DISCUSSION

Surgical management of long gap esophageal atresia remains controversial¹. Patients with long-gap EA historically have been treated with initial cervical esophagostomy and delayed esophageal replacement. Attempts at native esophageal reconstruction have been associated with anastomotic complications as a result of tension in bringing the distant ends together². Nevertheless, most authors believe that elongation of the native esophagus provides a better functional outcome.

CONCLUSION

Preservation of native esophagus is superior to any esophageal replacement and will provide better functional outcome. The elongation of distal esophageal pouch is possible and made delayed primary anastomosis amenable for repair. Hence, long gap esophageal atresia not a must to resort to esophageal replacement.

REFERENCES

- 1)Stringel G, Lawrence C, McBride W. Repair of long gap esophageal atresia without anastomosis. J Pediatr Surg. 2010 May;45(5):872-5. doi: 10.1016/j.jpedsurg.2010.02.003. PMID: 20438916
- 2)Buonuomo V, Nanni L, Canali R, Pintus C. Atresia esofagea: nostra esperienza e revisione della letteratura [Esophageal atresia. Personal experience and review of the literature]. Ann Ital Chir. 2007 Sep-Oct;78(5):385-8. Italian. PMID: 18338544
- 3)Healey PJ, Sawin RS, Hall DG, Schaller RT, Tapper D. Delayed Primary Repair of Esophageal Atresia With Tracheoesophageal Fistula: Is It Worth the Wait? Arch Surg. 1998;133(5):552-556. doi:10.1001/archsurg.133.5.552