

OESOPHAGEAL REPLACEMENT WITH STOMACH LEADS TO SERIOUS LONG TERM MORBIDITY

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Aims: To assess the long term function and complications of oesophageal replacement using stomach.

Methods: All children undergoing oesophageal replacement surgery in a regional centre were prospectively studied. Indications for surgery, early and late complications were recorded. Any complication within 30 days of surgery was classified as early.

Results: 9 children underwent oesophageal replacement between 2003 and 2013, for long gap oesophageal atresia 5, caustic ingestion 2, foreign body ingestion 1, and achalasia 1. Four had thoracotomy, 3 had trans-hiatal resection and 2 had laparoscopic trans-hiatal resection. In 3 cases the stomach size was reduced in size by amputation of the lesser curve, 4 had pyloroplasty and 3 had a feeding jejunostomy.

Complications were seen in every case. Three had an early complication and 8 had a late complication. Four children experienced one complication while 5 had three complications.

One child died 8 months after surgery, following perforation after dilatation. Median follow up for the remaining 8 patients was 9 years (range 2.5 years-13 years). Complications within 30d of surgery were: anastomotic leak 2, lung compression by stomach and acute need for stomach reduction, 1. Late complications included anastomotic stricture in 6 children (requiring 8,8,5,4,2 and one dilatation so far), perforation of a jejunostomy 1, and para-gastric hiatal hernia. All 8 surviving children have been anaemic. Biopsies of the remaining native oesophagus have shown inflammation and one case of dysplasia.

Conclusions: Long term follow up of gastric transposition replacement of the oesophagus in children reveals a very high incidence of later stricture, oesophagitis and iron deficiency anaemia. We have found the complication of oesophagitis in the remaining native oesophagus and anaemia to be an intractable problem.