

PERI-OPERATIVE OUTCOMES FROM OESOPHAGEAL REPLACEMENT BY GASTRIC TRANSPOSITION: A SINGLE SURGEON'S EXPERIENCE FROM A CONSULTANT CAREER IN A TERTIARY CARE PAEDIATRIC CENTRE

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Aim of the study: Oesophageal replacement is a rare procedure in the paediatric population, and many paediatric surgeons have limited experience. The aim of this study was to report peri-operative outcomes following gastric transposition for replacement of the oesophagus through evaluation of a single surgeon's experience in a tertiary care paediatric centre.

Methods: A patient database was consulted to identify all patients who underwent oesophageal replacement performed by a single surgeon at a tertiary care paediatric centre. Clinical notes were consulted following departmental approval, and data extracted on demographics, indications for procedure, pre-operative clinical course, and short-term clinical outcomes.

Main results: Twenty one patients were identified over a 28 year period. Indications for surgery were long-gap Oesophageal Atresia (n=19), of which 11 had trachea-oesophageal fistula), caustic injury (n=1), and congenital stricture (n=1). All patients were fed via gastrostomy prior to surgery. Five had undergone previous primary repair of their oesophagus. At surgery, median age was 8.5 months (range 1-55) and median weight was 7.2kg (range 3.8-17.4kg). Median operating time was five hours (range 3-10). Eleven procedures were performed with right sided thoracotomy, whereas ten were performed via abdominal and cervical incisions only.

Median post-operative length of stay was 20 days (range 7-130), with median intensive care stay two days (range 1-63). There were no peri-operative deaths. Post-operative complications included anastomotic leakage treated non-operatively (n=2), anastomotic stricture (n=1), and lower respiratory tract infections (n=10). Three patients required return to theatre: two for jejunostomy revision, and one required abdominal mobilisation of the gastric conduit.

Conclusions: Oesophageal replacement with gastric transposition offers a potentially life-changing option for treating long-gap oesophageal atresia, caustic injury and other major oesophageal disease. However, it requires significant surgical technical expertise and can be associated with significant morbidity. The data presented here can help surgeons describe outcomes to parents when considering this surgery.