

SURGICAL MANAGEMENT OF GORD IN INFANTS: SURGICAL JEJUNOSTOMY VS PRIMARY LAPAROSCOPIC FUNDOPLICATION

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Aims: Significant variation in the management of severe gastroesophageal reflux(GORD) in infants(<1yr) continues to exist. Current options include: feeding jejunostomies, as either a temporising or definitive procedure, and primary fundoplication. There have been concerns regarding the failure rate of early fundoplication in this age group. This study aimed to compare outcomes, specifically reoperation rates, following surgical jejunostomy and laparoscopic fundoplication in infants(<1yr) with severe GORD.

Methods: Retrospective review of infants(<1yr) undergoing surgery for reflux and failure to thrive(January 2008–August 2015). Infants were allocated to two groups, those having a surgically placed jejunostomy and those undergoing primary laparoscopic Nissen fundoplication and gastrostomy button insertion. The primary outcome measure was requirement for further surgical procedures. Data are presented as median and interquartile range(IQR) unless otherwise stated. Fischer's exact test was used for categorical data with $p < 0.05$ taken as significant.

Main Results: During the study period 13 infants had a surgically inserted jejunostomy as their primary procedure with a median age of 5 months(IQR5-8). In this group 9/13 patients required further surgery (total 15 procedures), including 7/13 who went on to have a fundoplication. Median follow up was 55m(IQR28-94) during which time 5/13 infants died.

In the primary laparoscopic fundoplication group 10 patients were identified, median age 6m(IQR4.25-8.75). During follow up only 2 had a further surgical procedure, which gave a significant absolute risk reduction of further operation of 49% (95%CI:14.0-84.5, $p=0.03$). Median follow up was 57m(IQR35-62), there was 1 death during this period which was not significantly different to the jejunostomy group ($p=0.18$).

Conclusions: In the management of severe reflux in infants(<1yr) surgical jejunostomy is associated with a significantly higher risk of reoperation when compared to laparoscopic fundoplication. The failure rate of fundoplication is low and should be considered in suitable infants(<1yr) with severe reflux and failure to thrive.