Aim of the Study: To describe the incidence and clinical outcomes to one-year in patients born with oesophageal atresia with no distal tracheoesophageal fistula within a population cohort.

Methods: A prospective multicentre population cohort study of all infants born with oesophageal atresia in a one-year period, 2008/2009 investigating clinical outcomes up to one year following initial surgery was undertaken. Outcomes of infants with oesophageal atresia and a lower pouch fistula (Type C), have previously been reported. A subgroup analysis describing the one-year outcomes of patients with oesophageal atresia and no tracheoesophageal fistula, (Type A) and those with only an upper pouch fistula, (Type B) was performed.

Main Results: Twenty-one of 151 infants were diagnosed with Type A or B oesophageal atresia (14%). Fifteen were Type A (71%) and 6 Type B (29%). Figure 1 illustrates the management pathways for these patients. With the exception of a patient with Type A, who died before reconstruction; all but four patients (all Type B) underwent more than one operation. Median time to delayed primary anastomosis in patients with Type A and Type B was 82 days (IQR 75-89 days). The median time to oesophageal replacement was 89 days (IQR 80-118 days). Median length of stay for infants with Type A or B oesophageal atresia from first operation to first discharge was 101 days (IQR 31-123 days). There was no significant difference in the number of infants who died before one year with Type A or B oesophageal atresia and those with Type C (p=0.68).

Conclusions: Oesophageal atresia with no distal tracheoesophageal fistula is uncommon, with only twenty-one infants of this type reported to have been born in the UK and Ireland in one year. These patients have a complex course, utilise a larger amount of resources and require substantial surgical expertise.

Fig 1. Management Pathways of Infants with Type A and B Oesophageal Atresia