

COMPARABLE OUTCOMES OF TRAINEE VS CONSULTANT OPERATING FOR OESOPHAGEAL ATRESIA

Geri E Jones¹, Rachel O Smyth¹, Nigel J Hall^{1,2}, Simon C Keys¹, Ori Ron¹, Michael Stanton¹, Lara Kitteringham¹, Henrik Steinbrecher¹, D Mervyn Griffiths¹, David Burge¹

¹Department of Paediatric Surgery & Urology, Southampton Children's Hospital, Southampton, UK,

²University Surgical Unit, Faculty of Medicine, University of Southampton, Southampton, UK

Aims of Study: Repair of oesophageal atresia (OA), with or without tracheo-oesophageal fistula (TOF), is an advanced technical surgical procedure. Consultants and trainees require exposure to cases for maintaining and gaining operative experience respectively whilst achieving satisfactory patient outcomes. Repair of OA is a neonatal surgical index case and a minimum number of cases are necessary to complete training. There may be a conflict of interest between providing adequate training opportunity, maintaining consultant experience and achieving good outcomes. We aimed to review outcomes of cases performed primarily by trainees compared to those performed by a consultant.

Methods: Ethically approved (15/WA/0153), retrospective casenote review of all consecutive infants who underwent surgical repair of OA with distal TOF (Type C) between Jan 1994 and Dec 2014. Only cases that underwent primary oesophageal anastomosis at the initial surgical procedure were included. Demographic and clinical data (median [range]) were recorded. Surgical outcomes were compared between cases that had trainee or consultant listed as primary operator using Fishers exact or Mann Whitney test. A stricture was defined as need for dilatation at any age. Elective calibrations/dilatations were not performed.

Results: One hundred and twenty-two cases met the inclusion criteria. Sixty-eight cases were operated by a consultant as the lead operator, 52 by a trainee (2 cases undeterminable and excluded). Infant demographics and clinical characteristics were similar between groups (**Table**). All infants survived to hospital discharge. Surgical outcomes were similar for cases operated by a trainee and consultant as primary operator.

Conclusion: Surgical outcomes for repair of OA/TOF are not adversely affected by trainee surgeons performing the procedure. Trainees with appropriate skill and experience should perform OA/TOF repair under supervision. Continued trainee operating on cases of OA/TOF should be encouraged. These data are important for understanding the inter-relationship between provision of training and surgical outcomes.

Table: Infant demographics, clinical details and surgical outcomes

Infant demographics and clinical information					
	Male	BW (kg)	GA (w)	Spitz I	Pre-op ventilation
Trainee n=52	32	2.8 (1.3-4.2)	39 (31-41)	50	8
Cons n=68	50	2.8 (1.2-4.1)	39 (29-42)	59	9
<i>P value</i>	0.17	0.11	0.80	0.89	0.62
Surgical outcomes					
	Post op pneumothorax	Anastomotic leak	Recurrent TOF	Stricture	Other
Trainee n=52	4	5	0	26	Wound infection (5)
Cons n=68	3	3	2	36	Wound infection (4), chyle leak (1) Laryngeal nerve injury (1)
<i>P value</i>	0.46	0.29	0.5	0.85	-