

## MULTICENTER SURVEY ON THE CURRENT SURGICAL MANAGEMENT OF ESOPHAGEAL ATRESIA IN BELGIUM AND LUXEMBOURG

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**Aim:** The management of Esophageal Atresia (EA) with or without Tracheo-Esophageal Fistula (TEF) differs between surgical teams and no consensus exists. We aimed to describe the current practice in the management of EA/TEF in Belgium and Luxembourg, and compare this to literature.

**Methods:** A questionnaire on the surgical management of EA/TEF was constructed and sent to all paediatric surgical centers in Belgium and Luxembourg. Results of the survey were compared to the literature.

**Results:** (see table 1) Preoperative echocardiography is routinely performed, but routine use of tracheobronchoscopy is still controversial. The thoracoscopic approach is sporadic, but there is an increasing interest in this challenging technique. The preferred operative technique is primary end-to-end anastomosis with interrupted, absorbable sutures via extra-pleural thoracotomy. The use of a transanastomotic tube is common practice, but the majority of surgeons waits at least three days to start enteral feeding, and at least five days to start oral feedings. It has been debated that an extra-pleural chest drain does not help in detecting and treating leakage, but many surgeons hold on to this habit. In pure/long gap EA, the preferred surgical management is gastrostomy formation first, and delayed primary anastomosis. The definition of this delay remains highly variable (range 0-24 months). Half of the surgeons prescribes routine prolonged postoperative ventilation, for tensile, respiratory or historical reasons. Routine postoperative contrast study is still widely used. Most surgeons agree to routinely start anti-reflux medication, but there is no consensus on the necessity, type, dosage nor duration of medical treatment.

**Conclusion:** Anno 2016, there are still many differences and controversies in the pre-, peri-, and postoperative management of EA/TEF. Part of it is based on habits and difficult to change without scientific evidence. Prospective (inter)national registries may further clarify differences and changes in management, and may lead to more consensus.

TABLE 1	SURVEYS				PROSPECTIVE COHORT STUDIES		
	Current report	Zani 2014	Shawyer 2014	Lal 2013	Burge 2013	Sfeir 2013	Piso Prato 2015
Number of participants	14 PSU 30 S	160 S	57 S	170 S	28 PSU	38 PSU	52 PSU
Pre-op bronchoscopy	36% EA/TEF 46% LGEA	43%	x	60% routine 13% selective	x	21,3%	47%
Routine use thoracoscopy	21% EA/TEF 31% LGEA	6%	x	50%	2,5%	x	3%
Chest drain	57% EA/TEF 77% LGEA	69%	70%	83%	53,7%	x	91%
TAT	100%	90%	85%	84%	98,3%	x	88%
Prolonged ventilation	50% EA/TEF 61% LGEA	56%	x	25%	89,5%	x	x
Routine Contrast study	86% EA/TEF 100% LGEA	72%	70%	85%	16,3%	x	84%
Reflux medication	93%	x	86%	76%	51,6	86%	x

PSU: Paediatric Surgical Unit; S: surgeons; EA/TEF: Esophageal Atresia with Tracheo-Esophageal Fistula; LGEA: long gap Esophageal Atresia; TAT: Transanastomotic Tube; x: no data available.