

Table 2: Studies reporting endoscopic screening following oesophageal atresia repair or replacement

Author	Setting and study type	Population and age (range)	Intervention	Outcomes
Ure (1995) ⁷⁴	Single centre, prospective cohort	Long gap OA with colonic interposition 1963-71 (n=9) Mean 24 years (22-27)	UGIE + biopsies (n=3)	0 cases of metaplasia or malignancy (0%)
Somppi (1998) ¹⁵	Single centre, prospective cohort	OA repair/replacement 1963-93 (n=51)	UGIE + biopsies (n=41)	2 gastric metaplasia (4.9%) Mean 12.6 years (3.5-30)
Khan (1998) ⁷⁵	Single centre, retrospective cohort	Colonic interposition for oesophageal replacement 1974-93 (n=25 of which OA n=23)	UGIE + biopsies (n=13)	0 cases of metaplasia (0%) (5-15 years)
Krug (1999) ¹⁴	Single centre, prospective cohort	OA repair 1971-78 (n=39) (18-26 years)	UGIE + biopsies (n=34)	2 intestinal metaplasia (5.8%)
Deurloo (2003) ¹²	Single centre, prospective cohort	OA repair 1947-72 (n=38) Median 34 years (28-45)	UGIE + biopsies (n=21)	1 intestinal metaplasia (4.8%)
Deurloo (2005) ¹³	Single centre, prospective cohort	OA repair 1973-85 (n=92) Median 17 years (10-26)	UGIE + biopsies (n=40)	3 gastric metaplasia (7.5%)
Holschneider (2007) ⁴⁹	Single centre, retrospective cohort	Funduplications 1993-2005 (n=160 of which OA n=87) Median 4.3yrs (1mo-10yrs)	UGIE + biopsies (n=40)	1 intestinal metaplasia (2.5%)
Taylor (2007) ⁵¹	Single centre, prospective cohort	OA repair before 1982 reviewed in clinic 2000-03 (n=132) Mean 33 years (22-48)	UGIE + biopsies (n=62)	7 intestinal metaplasia (11.3%) of which 3 had concurrent low-grade dysplasia 1 squamous cell carcinoma*
Castilloux (2010) ²⁰	Single centre, prospective cohort	OA repair and >2yrs old (or <2yrs old and indication for UGIE) 2005-2008 (n=45) Median 7.3 years (5mo-17yrs)	UGIE + biopsies	16 gastric metaplasia (35.6%) Median 9.8 years (3.4-13.2)
Sistonen (2010) ¹⁰	Single centre, prospective cohort	OA repair 1947-85 (n=98) Mean 36 years (21-57)	UGIE+ biopsies	15 gastric metaplasia, 6 intestinal metaplasia (20.7%)
Burjonrappa (2011) ⁹	Single centre, retrospective cohort	OA repair 1990-2009 (n=51) Mean 6.6 years (7mo-19yrs)	UGIE + biopsies (n=38)	11 gastric metaplasia, 1 intestinal metaplasia (31.6%) Mean 13 years
Pedersen (2013) ⁸	Single centre, prospective cohort	OA repair 1993-2005 (n=59) Median 10.2 years (5-15)	UGIE + biopsies (n=56)	1 intestinal metaplasia (1.8%)
Reismann (2014) ⁷⁶	Single centre, retrospective cohort	Long gap OA treated with gastric transposition 1999-2012 (n=9) Mean 6.2yrs (1-4-10.2)	UGIE +/- biopsies (n=8)	0 cases of metaplasia or malignancy (0%)
Huynh-Trudeau (2015) ⁵⁶	Single centre, prospective cohort	OA repair/interposition with dysphagia (n=41) Mean 25 years (18-44)	UGIE + biopsies (n=32)	6 gastric metaplasia, 4 intestinal metaplasia (31.3%)

Koziarkiewicz (2015) ⁵⁷	Single centre, prospective cohort	OA repair 1990-2005 Median 13.7years (7-17) (n=30)	UGIE + biopsies (n=12)	2 intestinal metaplasia (16.7%)
Cartabuke (2016) ⁵⁸	Single centre, retrospective cohort	OA repair/replacement 2011-2014 (n=43) Median 8 years (IQR 3-20)	UGIE + biopsies (n=31)	2 patients Barrett's oesophagus (type not specified) (6.5%)
Gatsinsky (2016) ⁵⁹	Single centre, prospective cohort	OA repair 1968-1983 (n=29) Median 31 years (25-40)	UGIE + biopsies (n=24)	2 intestinal metaplasia (8.3%)
Iwanczak (2016) ⁶⁰	Single centre, retrospective cohort	Thoracoscopic OA+/-TOF repair (n=22) Mean 47 months (16-79)	UGIE +/- biopsies (n=11)	1 gastric metaplasia (9.1%)
Koivusalo (2016) ²¹	Single centre, retrospective cohort	Treated OA 1980-2014 (n=211)	UGIE + biopsies (n=209)	31 gastric metaplasia, 4 intestinal metaplasia (16.7%) Median 22 years (16-32)
Schneider (2016) ⁷	Multicentre prospective cohort	Primary OA repair (n=120) Mean 16.5 years (15-19)	UGIE + biopsies (n=120)	50 gastric metaplasia, 1 intestinal metaplasia (42.5%)
Hsieh (2017) ²²	Multicentre, retrospective cohort	OA followed up in specialist clinic (n=541)	UGIE + biopsies	7 intestinal metaplasia (1.3%) Median 10 years (2-17.2)
Vergouwe (2018) ⁶⁸	Single centre, prospective cohort	OA patients 1948-1999 (n=151) Median 25.4 years (16.8- 68.6)	UGIE + biopsies (n=151)	26 gastric metaplasia, 10 intestinal metaplasia (23.8%)
Youn (2018) ⁷⁷	Single centre prospective cohort	Gastric tube interposition (n=25 with OA) Median 12 years (3-18)	UGIE + biopsies (n=20)	0 cases of metaplasia (0%) Median 15.4 years (9-18)
Petit (2019) ⁷³	Single centre prospective cohort	OA patients 2005-2014 (n=77) Median 4.9 years (3.6-8)	UGIE + biopsies (n=73)	9 gastric metaplasia (12.3%) Median 1 and 2 years

OA = oesophageal atresia. TOF = tracheal oesophageal fistula. UGIE = upper gastrointestinal tract endoscopy

*previously reported⁵