Supplementary Table 1. Cochrane Collaboration's tool for assessing risk of bias

Study	а	b	С	d	е	f	g
Harugop et al. (2008) [13]	+	_	-	_	?	+	?
Lade et al. (2014) [14]	-	-	-	-	?	+	?
Kaya et al. (2017) [19]	+	+	-	-	?	+	?
Jyothi et al. (2017) [9]	+	_	-	-	?	+	?

a, random sequence generation; b, allocation concealment; c, blinding of participants and personnel; d, blinding of outcomes assessment; e, incomplete outcome data; f, selective reporting; g, other bias; +, low risk of bias; -, high risk of bias; ?, unclear risk of bias.

Supplementary Table 2. Newcastle-Ottawa scale of bias risk for the non-randomized studies

Study	Adequate case definition	Representa- tiveness of cases	Selection of controls	Definition of controls	Comparability	Ascertainment of exposure	Method of ascertainment	Nonresponse rate	Score/10
Plodpai and Paje (2017) [10]	*	*	*	*	**	*	*		8
Nassif et al. (2015) [12]	*	*	*	*	**	*	*		8
Dundar et al. (2014) [18]	*	*	*	*	**	*	*		8
Huang et. al. (2016) [20]	*	*	*	*	**	*	*		8
Kuo and Wu (2017) [24]	*	*	*	*	**	*	*		8
James (2017) [11]	*	*	*	*	*	*	*		7
Raj and Meher (2001) [15]	*	*	*	*	*	*	*		7
Lakpathi et al. (2016) [16]	*	*	*	*	**	*	*		8
Kumar et al. (2015) [17]	*	*	*	*	**	*	*		8

	Experin	nental	Co	ontrol				Weight	Weight
Study	Events	Total	Events	Total	Odds Ratio	OR	95%-Cl	(fixed)	(random)
alloc.1 = adult									
Joithy et al	55	60	56	60		0.79	[0.20; 3.08]	7.9%	7.9%
Nasif et al	20	22	19	23		2.11	[0.34; 12.86]	4.5%	4.5%
Harugop et al	41	50	43	50		0.74	[0.25; 2.18]	12.8%	12.8%
Lade et al	25	30	25	30		1.00	[0.26; 3.89]	8.0%	8.0%
Annop et al	18	20	17	20		1.59	[0.24; 10.70]	4.1%	4.1%
Lakpathi et al	26	30	27	30		0.72	[0.15; 3.54]	5.8%	5.8%
Kumar M et al	25	30	26	30		0.77	[0.19; 3.20]	7.3%	7.3%
Kaya et al (2017)	13	13	13	13				0.0%	0.0%
Huang et al (2016)	49	50	49	50		- 1.00	[0.06; 16.44]	1.9%	1.9%
Kuo et al (2017)	72	74	56	57		0.64	[0.06; 7.27]	2.5%	2.5%
Fixed effect model		379		363		0.91	[0.54; 1.52]	54.8%	
Random effects model						0.91	[0.54; 1.52]		54.8%
Heterogeneity: $I^2 = 0\%$, τ	² = 0, p =	= 0.99							
alloc.1 = pediatric									
Plodpai et al	87	90	83	91		2.80	[0.72; 10.90]	8.0%	8.0%
Adrian et al	92	111	146	167		0.70	[0.36; 1.37]	32.6%	32.6%
Dundar R et al	26	30	28	30		0.46	[0.08; 2.75]	4.7%	4.7%
Fixed effect model		231		288	-	0.85	[0.48; 1.51]	45.2%	
Random effects model						0.95	[0.37; 2.45]		45.2%
Heterogeneity: /2 = 46%,	$\tau^2 = 0.33$	3. p =	0.16						
÷ 7 .									
Fixed effect model		610		651	4	0.88	[0.60; 1.30]	100.0%	-
Random effects model	I				4	0.88	[0.60; 1.30]		100.0%
Heterogeneity: $I^2 = 0\%$, τ	² = 0, p -	0.91							
0					0.1 0.5 1 2 10				

Supplementary Fig. 1. Forest plot comparing graft success rate between endoscopic ear surgery (experimental) and microscopic ear surgery (control), according to age group (pediatric vs. adult). Events represent the number of cases with graft success. OR, odds ratio; CI, confidence interval.