Omitted study	Effect size with 95% CI	p-value
Arias-Marzán	27.14 [22.69, 31.59]	0.000
Baklacı	26.97 [22.53, 31.41]	0.000
Bayazit	27.52 [23.10, 31.94]	0.000
Bizakis	27.69 [23.31, 32.07]	0.000
Bulğurcu	27.52 [23.06, 31.97]	0.000
Choi	25.87 [22.19, 29.56]	0.000
Di Martino	27.93 [23.73, 32.13]	0.000
Faramarzi	27.60 [23.17, 32.03]	0.000
Genc	27.04 [22.59, 31.49]	0.000
Gulotta, Visconti	27.38 [22.89, 31.86]	0.000
Gulotta, Pace	27.29 [22.79, 31.78]	0.000
Gülüstan	27.38 [22.89, 31.86]	0.000
Jaswal	27.40 [22.94, 31.86]	0.000
Kalcioglu	27.84 [23.55, 32.13]	0.000
Lin	26.99 [22.55, 31.44]	0.000
Magliulo 2011	27.24 [22.74, 31.73]	0.000
Magliulo 2018	27.49 [23.04, 31.93]	0.000
Moody	27.57 [23.13, 32.01]	0.000
Ocak	27.26 [22.81, 31.72]	0.000
Ozbek	26.84 [22.44, 31.24]	0.000
Sahin	26.85 [22.44, 31.26]	0.000
Tanrivermiş Sayit	26.10 [22.18, 30.01]	0.000
Selesnick	27.03 [22.59, 31.47]	0.000
Shinnabe Oct 2014	27.06 [22.59, 31.53]	0.000
Shinnabe Sept 2014	26.96 [22.51, 31.41]	0.000
Trinidade	27.56 [23.12, 32.01]	0.000
Wang	27.13 [22.66, 31.61]	0.000

Random-effects REML model

Figure S1 Leave-one-out sensitivity analysis performed to investigate the impact on effect sizes and pooled prevalence after exclusion of any one study. CI, confidence interval; REML, restricted maximum likelihood.
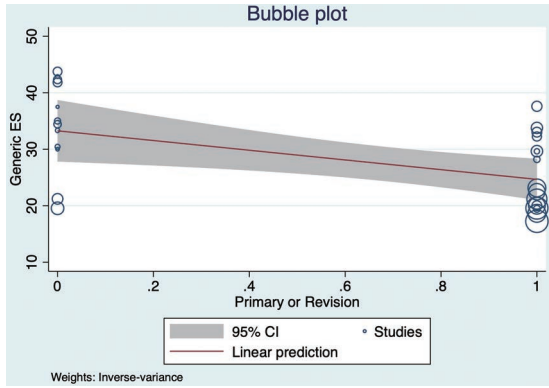
Figure S2 Bubble plot, or meta-regression scatter plot, with regression line (red) and 95% CI bounds (grey) to evaluate the effect of primary and revision surgery on incidence of FCD. On the x-axis, 0 and 1 corresponds to the revision and primary surgery cohorts respectively. CI, confidence interval; ES, effect size; FCD, facial canal dehiscence.
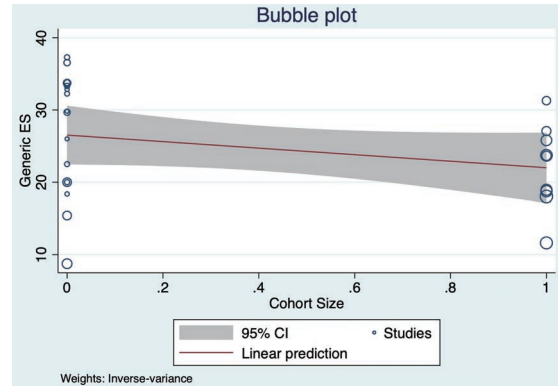

Figure S4 Bubble plot, or meta-regression scatter plot, with regression line (red) and 95% CI bounds (grey) to evaluate the effect of cohort size (less than or greater than 300 patients) on incidence of FCD. On the x-axis, 0 and 1 corresponds to the n<300 and n>300 cohorts respectively. CI, confidence interval; ES, effect size; FCD, facial canal dehiscence.
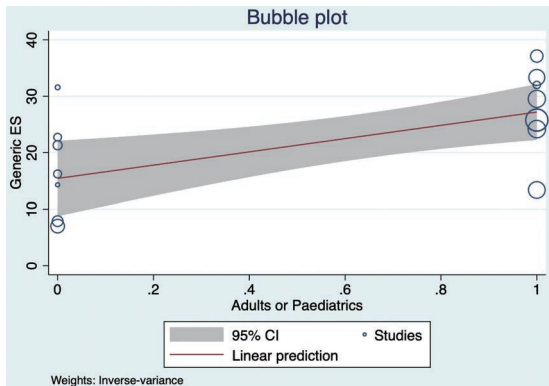

Figure S3 Bubble plot, or meta-regression scatter plot, with regression line (red) and 95% CI bounds (grey) to evaluate the effect of age groups (adults or paediatrics) on incidence of FCD. On the x-axis, 0 and 1 corresponds to the paediatric and adult cohorts respectively. CI, confidence interval; ES, effect size; FCD, facial canal dehiscence.

Table S1 Leave-one-out sensitivity analysis performed for calculating the odds ratio of FCD in adult patients compared to paediatric patients

Omitted study	Odds ratio (95% CI)	Test for overall effect
None	1.83 (0.96–3.47)	Z=1.84 (P=0.07)
Arias-Marzán, 2019, (7)	1.78 (0.90–3.55)	Z=1.65 (P=0.10)
Bizakis, 2006, (9)	2.25 (1.30–3.91)	Z=2.90 (P=0.004)
Gulotta, Visconti, 2020, (13)	1.54 (0.91–2.92)	Z=1.32 (P=0.19)
Gülüstan, 2014, (15)	2.05 (0.92–4.55)	Z=1.77 (P=0.08)
Magliulo, 2011, (18)	1.57 (0.82–3.01)	Z=1.35 (P=0.18)
Sahin, 2020, (4)	1.97 (0.92–4.21)	Z=1.76 (P=0.08)
Shinnabe, October 2014, (24)	1.73 (0.82–3.67)	Z=1.43 (P=0.15)

The odds ratio is calculated using the Mantel-Haenszel test with a random-effects model and 95% confidence intervals. On omission of Bizakis *et al.*, the test for overall effect is significant and the confidence interval of the summary effect does not cross the line-of-no-effect. CI, confidence interval; FCD, facial canal dehiscence.