The combined analysis, pooling estimates across age subgroups using a clustered approach to account for the correlation between patients aged less than and more than 2 years, reflects their toilet training status.

Outcome	Total cohort N=239	p-value	Age more than 2 years N=58	p-value	Age less than 2 years N=181	p-value
	Odds ratio (95% Confidence Interval)		Odds ratio (95% Confidence Interval)		Odds ratio (95% Confidence Interval)	
Composite	0.94 (0.39-2.28)	0.897	0.71 (0.17-2.98)	0.635	1.26 (0.38-4.21)	0.703
Combine 2-groups	0.94 (0.53-1.66)	0.840				
Enterocolitis	1.17 (0.43-3.15)	0.762	2.29 (0.50-10.63)	0.288	0.70 (0.18-2.65)	0.596
Combine 2-groups	1.17 (0.38-3.62)	0.790				
Obstructive symptom	0.50 (0.20-1.25)	0.139	0.46 (0.10-1.99)	0.297	0.64 (0.18-2.27)	0.488
Combine 2-groups	0.50 (0.36-0.69)	<0.001				
Fecal soiling	1.17 (0.38-3.62)	0.784	0.62 (0.10-3.79)	0.607	6.20 (0.73-52.54)	0.094
Combine 2-groups	1.17 (0.22-6.27)	0.854				

The combined analysis of obstructive symptoms demonstrated a statistically significant reduction associated with TERPT compared with the Duhamel operation (OR 0.50, 95% CI 0.36–0.69; p<0.001), a finding consistent across both age subgroups (age ≥2 years: OR 0.46, 95% CI 0.10–1.99; age <2 years: OR 0.64, 95% CI 0.18–2.27), though neither subgroup alone reached statistical significance, likely reflecting limited power within individual strata. These findings suggest that the perioperative and functional outcome comparisons in our primary analysis were not substantially driven by differential toilet training status between groups.

Among patients aged less than 2 years at surgery, fecal soiling at 6 months was numerically more frequent in the TERPT group compared with the Duhamel group (OR 6.20, 95% CI 0.73–52.54; p=0.094). However, this estimate should be interpreted with considerable caution given the very wide confidence interval, reflecting a small number of events within this subgroup, and the finding did not reach statistical significance.

Outcome Distribution Chart in patient who age less that 24 months

