

Supplementary File 1. Overall risk of bias.

	Experimental	Comparator	Randomization process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported result	Overall	
Dike et al. (2020) ²⁴	CO ₂	Air	+	+	+	+	+	+	Low risk
Dharmaraj et al. (2020) ²⁵	CO ₂	Air	+	+	+	+	+	+	Some concerns
Kresz et al. (2019) ²⁶	CO ₂	Air	+	+	+	+	+	+	High risk
Thornhill et al. (2018) ²⁷	CO ₂	Air	+	+	+	+	?	!	
Homan et al. (2016) ²⁸	CO ₂	Air	+	+	+	+	?	!	

Supplementary File 2. GRADEpro. Supplementary file.

Insufflation of Carbon Dioxide versus insufflation of air during colonoscopy in pediatric patients: A systematic review and meta-analysis of randomized controlled trials

Patient or population: Colonoscopy insufflation in pediatric patients

Setting:

Intervention: CO₂

Comparison: Air

Outcomes	N ^o of participants (studies) Follow up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects	
				Risk with Air	Risk difference with CO ₂
Procedure time	256 (4 RCTs ^[24-26,28])	⊕⊕○○ LOW ^{a,b}	-	The mean procedure time was 0	MD 14.95 higher (9.69 lower to 39.59 higher)
Abdominal pain immediately post-procedure	213 (3 RCTs ^[25-27])	⊕⊕⊕⊕ HIGH	not estimable	387 per 1.000	387 fewer per 1.000 (387 fewer to 387 fewer)
Abdominal pain at 24 hours post-procedure	216 (3 RCTs ^[25,27,28])	⊕⊕○○ LOW ^{a,b}	not estimable	82 per 1.000	82 fewer per 1.000 (82 fewer to 82 fewer)

*The risk in the intervention group (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

CI, confidence interval; MD, mean difference.

GRADE Working Group grades of evidence.

High certainty: We are very confident that the true effect lies close to that of the estimate of the effect.

Moderate certainty: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.

Low certainty: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.

Very low certainty: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect.

^aHigh heterogeneity.

^bNon significant difference.