

Comparison 2.i. Butorphanol intramuscular (IM) compared with pethidine (IM)

Source:† Ullman R, Smith LA, Burns E, Mori R, Dowswell T. Parenteral opioids for maternal pain management in labour. Cochrane Database Syst Rev. 2010;(9):CD007396.

No. of studies	Study design	Quality assessment					Other considerations	No. of participants		Effect		Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision			Butorphanol IM	Pethidine IM	Relative (95% CI)	Absolute (95% CI)		
Additional analgesia needed													
1	RCT	serious ^a	not serious	not serious	very serious ^b	none	17/40 (42.5%)	19/40 (47.5%)	RR 0.89 (0.55-1.45)	52 fewer per 1000 (from 214 fewer to 214 more)	⊕○○○ VERY LOW	critical	
Nausea													
1	RCT	serious ^a	not serious	not serious	very serious ^b	none	0/40 (0.0%)	2/40 (5.0%)	RR 0.20 (0.01-4.04)	40 fewer per 1000 (from 50 fewer to 152 more)	⊕○○○ VERY LOW	critical	
Vomiting													
1	RCT	serious ^a	not serious	not serious	very serious ^b	none	1/40 (2.5%)	2/40 (5.0%)	RR 0.50 (0.05-5.30)	25 fewer per 1000 (from 48 fewer to 215 more)	⊕○○○ VERY LOW	critical	
Neonatal resuscitation													
1	RCT	serious ^a	not serious	not serious	very serious ^b	none	0/40 (0.0%)	1/40 (2.5%)	RR 0.33 (0.01-7.95)	17 fewer per 1000 (from 25 fewer to 174 more)	⊕○○○ VERY LOW	critical	
Naloxone administration (neonatal)													
1	RCT	serious ^a	not serious	not serious	very serious ^b	none	0/40 (0.0%)	1/40 (2.5%)	RR 0.33 (0.01-7.95)	17 fewer per 1000 (from 25 fewer to 174 more)	⊕○○○ VERY LOW	critical	

CI: confidence interval; RCT: randomized controlled trial; RR: risk ratio.

^a Effect estimate from single study with a moderate risk of bias.

^b Wide confidence interval crossing the line of no effect, small sample size and few events.

† Updated for the purpose of this guideline.