

## Comparison 2.m. Butorphanol intravenous (IV) compared with pethidine (IV)

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					No. of participants		Effect		Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Butorphanol IV	Pethidine IV	Relative (95% CI)	Absolute (95% CI)		
<b>Pain relief score</b>												
1	RCT	serious <sup>a</sup>	not serious	not serious	serious <sup>b</sup>	none	40	40	-	MD 0.67 higher (0.25 higher to 1.09 higher)	⊕⊕○○ LOW	critical
<b>Pain score (1 hour after drug administration)</b>												
1	RCT	serious <sup>a</sup>	not serious	not serious	serious <sup>b</sup>	none	40	40	-	MD 0.6 lower (1.02 lower to 0.18 lower)	⊕⊕○○ LOW	critical
<b>Further analgesia (a second dose) needed</b>												
1	RCT	serious <sup>a</sup>	not serious	not serious	very serious <sup>c</sup>	none	23/50 (46.0%)	24/50 (48.0%)	RR 0.96 (0.63-1.45)	19 fewer per 1000 (from 178 fewer to 216 more)	⊕○○○ VERY LOW	critical
<b>Epidural</b>												
1	RCT	serious <sup>a</sup>	not serious	not serious	very serious <sup>d</sup>	none	5/100 (5.0%)	5/100 (5.0%)	RR 1.00 (0.30-3.35)	0 fewer per 1000 (from 35 fewer to 118 more)	⊕○○○ VERY LOW	critical
<b>Nausea and/or vomiting</b>												
1	RCT	serious <sup>a</sup>	not serious	not serious	serious <sup>e</sup>	none	0/100 (0.0%)	12/100 (12.0%)	RR 0.04 (0.00-0.67)	115 fewer per 1000 (from 0 to 40 fewer)	⊕⊕○○ LOW	critical
<b>Assisted vaginal delivery</b>												
1	RCT	serious <sup>a</sup>	not serious	not serious	very serious <sup>d</sup>	none	13/100 (13.0%)	10/100 (10.0%)	RR 1.30 (0.60-2.83)	30 more per 1000 (from 40 fewer to 183 more)	⊕○○○ VERY LOW	critical
<b>Caesarean section</b>												
1	RCT	serious <sup>a</sup>	not serious	not serious	very serious <sup>d</sup>	none	4/100 (4.0%)	5/100 (5.0%)	RR 0.80 (0.22-2.89)	10 fewer per 1000 (from 39 fewer to 95 more)	⊕○○○ VERY LOW	critical
<b>Apgar score &lt; 7 at 1 and 5 minutes - low score at 5 minutes</b>												
2	RCTs	serious <sup>f</sup>	not serious	not serious	very serious <sup>d</sup>	none	1/115 (0.9%)	1/115 (0.9%)	RR 1.00 (0.06-15.77)	0 fewer per 1000 (from 8 fewer to 128 more)	⊕○○○ VERY LOW	critical

† Updated for the purpose of this guideline.

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

- <sup>a</sup> Effect estimate from single study with a moderate risk of bias.
- <sup>b</sup> Small sample size.
- <sup>c</sup> Wide confidence interval crossing the line of no effect and small sample size.
- <sup>d</sup> Wide confidence interval crossing the line of no effect, small sample size and few events.
- <sup>e</sup> Small sample size and few events.
- <sup>f</sup> Pooled effect derived from studies with a moderate risk of bias.