

## Comparison 2.f. Pentazocine 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					No. of participants		Effect		Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Pentazocine IM	Pethidine IM	Relative (95% CI)	Absolute (95% CI)		
<b>Pain relief ("good" or "very good") at delivery</b>												
2	RCTs	serious <sup>a</sup>	not serious	not serious	very serious <sup>b</sup>	none	87/125 (69.6%)	81/128 (63.3%)	RR 1.08 (0.92-1.27)	51 more per 1000 (from 51 fewer to 171 more)	⊕○○○ VERY LOW	critical
<b>Pain relief poor (partial, none or worse) – no add-on drugs</b>												
3	RCTs	very serious <sup>c</sup>	serious <sup>d</sup>	not serious	serious <sup>e</sup>	none	124/186 (66.7%)	105/179 (58.7%)	RR 1.23 (0.74-2.05)	135 more per 1000 (from 153 fewer to 616 more)	⊕○○○ VERY LOW	critical
<b>Pain relief poor (partial, none or worse) – with promazine</b>												
1	RCT	very serious <sup>f</sup>	not serious	not serious	very serious <sup>g</sup>	none	11/43 (25.6%)	7/42 (16.7%)	RR 1.53 (0.66-3.58)	88 more per 1000 (from 57 fewer to 430 more)	⊕○○○ VERY LOW	critical
<b>Additional analgesia needed – pentazocine</b>												
1	RCT	very serious <sup>f</sup>	not serious	not serious	very serious <sup>g</sup>	none	14/46 (30.4%)	16/48 (33.3%)	RR 0.91 (0.50-1.65)	30 fewer per 1000 (from 167 fewer to 217 more)	⊕○○○ VERY LOW	critical
<b>Additional analgesia needed – pentazocine plus promazine</b>												
1	RCT	very serious <sup>f</sup>	not serious	not serious	very serious <sup>g</sup>	none	12/43 (27.9%)	7/42 (16.7%)	RR 1.67 (0.73-3.84)	112 more per 1000 (from 45 fewer to 473 more)	⊕○○○ VERY LOW	critical
<b>Nausea and vomiting – nausea</b>												
3	RCTs	very serious <sup>c</sup>	not serious	not serious	not serious	none	11/198 (5.6%)	23/193 (11.9%)	RR 0.46 (0.24-0.90)	64 fewer per 1000 (from 12 fewer to 91 fewer)	⊕⊕○○ LOW	critical
<b>Nausea and vomiting – vomiting</b>												
1	RCT	very serious <sup>f</sup>	not serious	not serious	very serious <sup>g</sup>	none	4/34 (11.8%)	5/39 (12.8%)	RR 0.92 (0.27-3.14)	10 fewer per 1000 (from 94 fewer to 274 more)	⊕○○○ VERY LOW	critical

† Updated for the purpose of this guideline.

No. of studies	Study design	Quality assessment					No. of participants		Effect		Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Pentazocine IM	Pethidine IM	Relative (95% CI)	Absolute (95% CI)		
<b>Assisted vaginal delivery - no add-on drugs</b>												
1	RCT	very serious <sup>f</sup>	not serious	not serious	very serious <sup>g</sup>	none	5/46 (10.9%)	1/48 (2.1%)	RR 5.22 (0.63-42.97)	88 more per 1000 (from 8 fewer to 874 more)	⊕○○○ VERY LOW	critical
<b>Assisted vaginal delivery - with promazine</b>												
1	RCT	very serious <sup>f</sup>	not serious	not serious	very serious <sup>g</sup>	none	4/43 (9.3%)	5/42 (11.9%)	RR 0.78 (0.23-2.71)	26 fewer per 1000 (from 92 fewer to 204 more)	⊕○○○ VERY LOW	critical
<b>Maternal sleepiness</b>												
3	RCTs	very serious <sup>c</sup>	not serious	not serious	serious <sup>e</sup>	none	129/198 (65.2%)	0.0%	RR 1.00 (0.89-1.12)	0 fewer per 1000 (from 0 fewer to 0 fewer)	⊕○○○ VERY LOW	critical
<b>Low Apgar score (≤ 7) at 1 and 5 minutes - low score at 1 minute</b>												
2	RCTs	very serious <sup>c</sup>	not serious	not serious	very serious <sup>g</sup>	none	6/120 (5.0%)	3/122 (2.5%)	RR 1.39 (0.06-32.97)	10 more per 1000 (from 23 fewer to 786 more)	⊕○○○ VERY LOW	critical
<b>Low Apgar score (≤ 7) at 1 and 5 minutes - low score at 5 minutes</b>												
1	RCT	very serious <sup>f</sup>	not serious	not serious	very serious <sup>g</sup>	none	0/29 (0.0%)	2/33 (6.1%)	RR 0.23 (0.01-4.54)	47 fewer per 1000 (from 60 fewer to 215 more)	⊕○○○ VERY LOW	critical

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

<sup>a</sup> Pooled effect size derived from studies with a moderate risk of bias.

<sup>b</sup> Wide confidence interval crossing the line of no effect and small sample size.

<sup>c</sup> Pooled effect size mainly derived from studies with a high risk of bias.

<sup>d</sup> Unexplained substantial heterogeneity.

<sup>e</sup> Wide confidence interval crossing the line of no effect.

<sup>f</sup> Effect estimate derived from a single study with a high risk of bias.

<sup>g</sup> Wide confidence interval crossing the line of no effect, few events and small sample size.