

## Comparison: Cardiotocography (CTG) compared with auscultation on labour admission

Source: Devane D, Lalor JG, Daly S, McGuire W, Smith V. Cardiotocography versus intermittent auscultation of fetal heart on admission to labour ward for assessment of fetal wellbeing. Cochrane Database Syst Rev. 2012;(2):CD005122.

No. of studies	Study design	Quality assessment					No. of participants		Effect		Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	CTG on admission	Auscultation on admission	Relative (95% CI)	Absolute (95% CI)		
<b>Caesarean section</b>												
4	RCTs	not serious	not serious	not serious	serious <sup>a</sup>	none	248/5657 (4.4%)	207/5681 (3.6%)	RR 1.20 (1.00-1.44)	7 more per 1000 (from 0 fewer to 16 more)	⊕⊕⊕○ MODERATE	critical
<b>Instrumental vaginal birth</b>												
4	RCTs	not serious	not serious	not serious	serious <sup>a</sup>	none	782/5657 (13.8%)	716/5681 (12.6%)	RR 1.10 (0.95-1.27)	13 more per 1000 (from 6 fewer to 34 more)	⊕⊕⊕○ MODERATE	critical
<b>Amniotomy</b>												
2	RCTs	not serious	not serious	not serious	not serious	none	708/1342 (52.8%)	679/1352 (50.2%)	RR 1.04 (0.97-1.12)	20 more per 1000 (from 15 fewer to 60 more)	⊕⊕⊕⊕ HIGH	critical
<b>Oxytocin for augmentation of labour</b>												
4	RCTs	not serious	not serious	not serious	not serious	none	1920/5653 (34.0%)	1874/5671 (33.0%)	RR 1.05 (0.95-1.17)	17 more per 1000 (from 17 fewer to 56 more)	⊕⊕⊕⊕ HIGH	critical
<b>Epidural</b>												
3	RCTs	not serious	serious <sup>b</sup>	not serious	serious <sup>a</sup>	none	2623/5360 (48.9%)	2688/5397 (49.8%)	RR 1.11 (0.87-1.41)	55 more per 1000 (from 65 fewer to 204 more)	⊕⊕○○ LOW	critical
<b>Continuous electronic fetal monitoring during labour</b>												
3	RCTs	not serious	serious <sup>b</sup>	not serious	not serious	none	3023/5359 (56.4%)	2247/5394 (41.7%)	RR 1.30 (1.14-1.48)	125 more per 1000 (from 58 more to 200 more)	⊕⊕⊕○ MODERATE	critical
<b>Admission to neonatal intensive care</b>												
4	RCTs	not serious	not serious	not serious	not serious	none	219/5656 (3.9%)	213/5675 (3.8%)	RR 1.03 (0.86-1.24)	1 more per 1000 (from 5 fewer to 9 more)	⊕⊕⊕⊕ HIGH	critical

No. of studies	Study design	Quality assessment					No. of participants		Effect		Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	CTG on admission	Auscultation on admission	Relative (95% CI)	Absolute (95% CI)		
<b>Apgar score &lt; 7 at or after 5 minutes</b>												
4	RCTs	not serious	not serious	not serious	serious <sup>a</sup>	none	39/5653 (0.7%)	38/5671 (0.7%)	RR 1.00 (0.54-1.85)	0 fewer per 1000 (from 3 fewer to 6 more)	⊕⊕⊕○ MODERATE	critical
<b>Neonatal seizures</b>												
1	RCT	not serious	not serious	not serious	serious <sup>a,c</sup>	none	10/4017 (0.2%)	14/4039 (0.3%)	RR 0.72 (0.32-1.61)	1 fewer per 1000 (from 2 fewer to 2 more)	⊕⊕⊕○ MODERATE	critical
<b>Hypoxic ischaemic encephalopathy</b>												
1	RCT	not serious	not serious	not serious	very serious <sup>a,d</sup>	none	6/1186 (0.5%)	5/1181 (0.4%)	RR 1.19 (0.37-3.90)	1 more per 1000 (from 3 fewer to 12 more)	⊕⊕○○ LOW	critical
<b>Fetal and neonatal deaths</b>												
4	RCTs	not serious	not serious	not serious	serious <sup>a,c</sup>	none	5/5658 (0.1%)	5/5681 (0.1%)	RR 1.01 (0.30-3.47)	0 fewer per 1000 (from 1 fewer to 2 more)	⊕⊕⊕○ MODERATE	critical
<b>Fetal blood sampling</b>												
3	RCTs	not serious	not serious	not serious	not serious	none	522/5360 (9.7%)	410/5397 (7.6%)	RR 1.28 (1.13-1.45)	21 more per 1000 (from 10 more to 34 more)	⊕⊕⊕⊕ HIGH	critical

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

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

<sup>b</sup> Severe unexplained heterogeneity.

<sup>c</sup> Few events but more than 3000 women.

<sup>d</sup> Small sample size and/or few events.