

Comparison: Delaying pushing compared with immediate pushing in women with epidural analgesia

Source: Lemos A, Amorim MM, Dornelas de Andrade A, de Souza AI, Cabral Filho JE, Correia JB. Pushing/bearing down methods for the second stage of labour. Cochrane Database Syst Rev. 2017;(10):CD009124.

No. of studies	Study design	Quality assessment					No. of participants		Effect		Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Delayed pushing	Immediate pushing	Relative (95% CI)	Absolute (95% CI)		
Duration of second stage (minutes)												
11	RCTs	serious ^a	serious ^b	not serious	not serious	none	1545	1504	-	MD 56.4 higher (42.05 higher to 70.76 higher)	⊕⊕○○ LOW	critical
Duration of pushing (minutes)												
11	RCTs	serious ^a	serious ^b	not serious	not serious	none	1485	1447	-	MD 19.05 lower (32.27 lower to 5.83 lower)	⊕⊕○○ LOW	critical
Spontaneous vaginal birth												
12	RCTs	serious ^a	not serious	not serious	not serious	none	1201/1583 (75.9%)	1091/1531 (71.3%)	RR 1.07 (1.02-1.11)	50 more per 1000 (from 14 more to 78 more)	⊕⊕⊕○ MODERATE	critical
Caesarean section												
9	RCTs	serious ^a	not serious	not serious	not serious	none	99/1412 (7.0%)	116/1371 (8.5%)	RR 0.83 (0.65-1.05)	14 fewer per 1000 (from 4 more to 30 fewer)	⊕⊕⊕○ MODERATE	critical
Instrumental birth												
10	RCTs	serious ^a	not serious	not serious	not serious	none	520/1534 (33.9%)	556/1473 (37.7%)	RR 0.89 (0.74-1.07)	42 fewer per 1000 (from 26 more to 98 fewer)	⊕⊕⊕○ MODERATE	critical
Rotational, mid-pelvic or posterior forceps												
5	RCTs	serious ^a	not serious	not serious	not serious	none	77/1083 (7.1%)	92/1068 (8.6%)	RR 0.82 (0.61-1.10)	16 fewer per 1000 (from 9 more to 34 fewer)	⊕⊕⊕○ MODERATE	critical
Perineal laceration												
7	RCTs	serious ^a	not serious	not serious	not serious	none	164/1413 (11.6%)	166/1362 (12.2%)	RR 0.94 (0.78-1.14)	7 fewer per 1000 (from 17 more to 27 fewer)	⊕⊕⊕○ MODERATE	critical

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		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Delayed pushing	Immediate pushing	Relative (95% CI)	Absolute (95% CI)		
Episiotomy												
5	RCTs	serious ^a	not serious	not serious	not serious	none	513/1163 (44.1%)	538/1157 (46.5%)	RR 0.95 (0.87-1.04)	23 fewer per 1000 (from 19 more to 60 fewer)	⊕⊕⊕○ MODERATE	critical
Postpartum haemorrhage												
3	RCTs	not serious	not serious	not serious	serious ^c	none	178/1121 (15.9%)	168/1078 (15.6%)	RR 1.04 (0.86-1.26)	6 more per 1000 (from 22 fewer to 41 more)	⊕⊕⊕○ MODERATE	critical
Dyspareunia												
1	RCT	not serious	not serious	not serious	very serious ^{c,d}	none	18/80 (22.5%)	16/82 (19.5%)	RR 1.15 (0.63-2.10)	29 more per 1000 (from 72 fewer to 215 more)	⊕⊕○○ LOW	critical
Faecal incontinence												
1	RCT	not serious	not serious	not serious	serious ^{c,d}	none	33/88 (37.5%)	23/90 (25.6%)	RR 1.47 (0.94-2.29)	120 more per 1000 (from 15 fewer to 330 more)	⊕⊕○○ LOW	critical
Fatigue after birth												
1	RCT	not serious	not serious	not serious	serious ^{c,d}		36	37	-	MD 6.4 lower (21 lower to 8.2 higher)	⊕⊕○○ LOW	critical
Maternal satisfaction												
1	RCT	not serious	not serious	not serious	serious ^{c,d}	none	37	36	-	MD 0.4 higher (7.34 lower to 8.14 higher)	⊕⊕○○ LOW	critical
Five-minute Apgar score < 7												
3	RCTs	serious ^a	not serious	not serious	very serious ^{c,d}	none	0/221 (0.0%)	2/192 (1.0%)	RR 0.15 (0.01-3.00)	9 fewer per 1000 (from 10 fewer to 21 more)	⊕○○○ VERY LOW	critical
Low umbilical cord pH (arterial and/or venous)												
4	RCTs	serious ^a	not serious	not serious	not serious	serious ^d	49/1092 (4.5%)	21/1053 (2.0%)	RR 2.24 (1.37-3.68)	25 more per 1000 (from 7 more to 53 more)	⊕⊕○○ LOW	critical

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

^a Most of the pooled effect derived from studies with a moderate or high risk of bias but without a substantial proportion (i.e. with < 50%) from studies with a high risk of bias.

^b Severe, unexplained heterogeneity.

^c Imprecise confidence interval.

^d Heterogeneity in outcome definition.