

Comparison 1: Perineal local cooling compared with no pain relief or usual care

Source: East CE, Dorward EDF, Whale RE, Liu J. Local cooling for relieving pain from perineal trauma sustained during childbirth. Cochrane Database Syst Rev. 2020;(10):CD006304.

Certainty assessment							No of patients		Effect		Certainty (GRADE)	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Cooling treatment (ice pack or cold gel pad)	No pain relief or usual care	Relative (95% CI)	Absolute (95% CI)		
Perineal pain within 4–6 hours of birth												
1	randomized trials	serious ^a	not serious	serious ^b	serious ^c	none	50	50	-	MD 4.46 lower (5.07 lower to 3.85 lower)	⊕○○○ VERY LOW	IMPORTANT
Perineal pain within 24 hours of birth – moderate + severe pain												
1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	114/215 (53.0%)	52/101 (51.5%)	RR 1.03 (0.82 to 1.29)	15 more per 1000 (from 93 fewer to 149 more)	⊕○○○ VERY LOW	IMPORTANT
Perineal pain within 24 hours of birth												
3	randomized trials	serious ^a	not serious	serious ^b	very serious ^{c,d}	none	83	83	-	MD 0.41 lower (1.78 lower to 0.95 higher)	⊕○○○ VERY LOW	IMPORTANT
Perineal pain 24–48 hours after birth – moderate + severe pain												
1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	84/215 (39.1%)	54/101 (53.5%)	RR 0.73 (0.57 to 0.94)	144 fewer per 1000 (from 230 fewer to 32 fewer)	⊕⊕○○ LOW	IMPORTANT

Certainty assessment							No of patients		Effect		Certainty (GRADE)	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Cooling treatment (ice pack or cold gel pad)	No pain relief or usual care	Relative (95% CI)	Absolute (95% CI)		
Perineal pain 24–48 hours after birth												
1	randomized trials	serious ^a	not serious	serious ^b	very serious ^{c,d}	none	35	36	-	MD 0.53 lower (1.45 lower to 0.39 higher)	⊕○○○ VERY LOW	IMPORTANT
Perineal oedema within 24 hours of birth												
1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	156/215 (72.6%)	73/101 (72.3%)	RR 1.00 (0.87 to 1.16)	0 fewer per 1000 (from 94 fewer to 116 more)	⊕⊕○○ LOW	IMPORTANT
Perineal oedema 24–48 hours after birth												
1	randomized trials	serious ^a	not serious	serious ^b	serious ^e	none	121/215 (56.3%)	69/101 (68.3%)	RR 0.82 (0.69 to 0.98)	123 fewer per 1000 (from 212 fewer to 14 fewer)	⊕○○○ VERY LOW	IMPORTANT
Perineal bruising within 24 hours of birth												
1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	127/215 (59.1%)	61/101 (60.4%)	RR 0.98 (0.81 to 1.19)	12 fewer per 1000 (from 115 fewer to 115 more)	⊕⊕○○ LOW	IMPORTANT
Perineal bruising 24–48 hours after birth												
1	randomized trials	serious ^a	not serious	serious ^b	serious ^e	none	164/215 (76.3%)	68/101 (67.3%)	RR 1.13 (0.97 to 1.32)	88 more per 1000 (from 20 fewer to 215 more)	⊕○○○ VERY LOW	IMPORTANT
Perineal redness, oedema, bruising, discharge, wound gaping within 24 hours of birth												
1	randomized trials	serious ^a	not serious	serious ^b	very serious ^{c,d}	none	35	36	-	MD 0.38 lower (1.14 lower to 0.38 higher)	⊕○○○ VERY LOW	IMPORTANT
Perineal redness, oedema, bruising, discharge, wound gaping 24–48 hours after birth												
1	randomized trials	serious ^a	not serious	serious ^b	serious ^c	none	35	36	-	MD 1.19 lower (2.07 lower to 0.31 lower)	⊕○○○ VERY LOW	IMPORTANT

Certainty assessment							No of patients		Effect		Certainty (GRADE)	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Cooling treatment (ice pack or cold gel pad)	No pain relief or usual care	Relative (95% CI)	Absolute (95% CI)		

Additional analgesia for relief of perineal pain within 24 hours of birth – non-prescription analgesia

1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	59/215 (27.4%)	32/101 (31.7%)	RR 0.87 (0.60 to 1.24)	41 fewer per 1000 (from 127 fewer to 76 more)	⊕○○○ VERY LOW	IMPORTANT
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Additional analgesia for relief of perineal pain within 24 hours of birth – prescription analgesia

1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	61/215 (28.4%)	23/101 (22.8%)	RR 1.25 (0.82 to 1.89)	57 more per 1000 (from 41 fewer to 203 more)	⊕○○○ VERY LOW	IMPORTANT
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Additional analgesia for relief of perineal pain 24–48 hours after birth – non-prescription analgesia

1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	51/215 (23.7%)	28/101 (27.7%)	RR 0.86 (0.58 to 1.27)	39 fewer per 1000 (from 116 fewer to 75 more)	⊕○○○ VERY LOW	IMPORTANT
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Additional analgesia for relief of perineal pain 24–48 hours after birth – prescription analgesia

1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	60/215 (27.9%)	21/101 (20.8%)	RR 1.34 (0.87 to 2.08)	71 more per 1000 (from 27 fewer to 225 more)	⊕○○○ VERY LOW	IMPORTANT
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Pain associated with activities of daily living (sitting) within 24 hours of birth

1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	206/212 (97.2%)	94/100 (94.0%)	RR 1.03 (0.98 to 1.09)	28 more per 1000 (from 19 fewer to 85 more)	⊕⊕○○ LOW	IMPORTANT
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Pain associated with activities of daily living (sitting) 24–48 hours after birth

1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	203/212 (95.8%)	96/100 (96.0%)	RR 1.00 (0.95 to 1.05)	0 fewer per 1000 (from 48 fewer to 48 more)	⊕⊕○○ LOW	IMPORTANT
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Pain associated with activities of daily living (walking) within 24 hours after birth

1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	196/212 (92.5%)	92/100 (92.0%)	RR 1.00 (0.94 to 1.08)	0 fewer per 1000 (from 55 fewer to 74 more)	⊕⊕○○ LOW	IMPORTANT
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Certainty assessment							No of patients		Effect		Certainty (GRADE)	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Cooling treatment (ice pack or cold gel pad)	No pain relief or usual care	Relative (95% CI)	Absolute (95% CI)		

Pain associated with activities of daily living (walking) 24–48 hours after birth

1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	190/212 (89.6%)	89/100 (89.0%)	RR 1.01 (0.93 to 1.09)	9 more per 1000 (from 62 fewer to 80 more)	⊕⊕○○ LOW	IMPORTANT
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Pain associated with activities of daily living (feeding baby) within 24 hours of birth

1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	88/212 (41.5%)	36/99 (36.4%)	RR 1.14 (0.84 to 1.55)	51 more per 1000 (from 58 fewer to 200 more)	⊕○○○ VERY LOW	IMPORTANT
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Pain associated with activities of daily living (feeding baby) 24–48 hours after birth

1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	66/211 (31.3%)	36/100 (36.0%)	RR 0.87 (0.63 to 1.21)	47 fewer per 1000 (from 133 fewer to 76 more)	⊕○○○ VERY LOW	IMPORTANT
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Maternal views and experiences of treatment at day 10 – satisfaction with overall perineal care (good + very good + excellent)

1	randomized trials	serious ^a	not serious	serious ^b	not serious	none	187/208 (89.9%)	84/100 (84.0%)	RR 1.07 (0.97 to 1.18)	59 more per 1000 (from 25 fewer to 151 more)	⊕⊕○○ LOW	IMPORTANT
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Women providing any breastmilk to baby 24–48 hours after birth

1	randomized trials	serious ^a	not serious	serious ^b	serious ^d	none	122/215 (56.7%)	64/100 (64.0%)	RR 0.89 (0.73 to 1.07)	70 fewer per 1000 (from 173 fewer to 45 more)	⊕○○○ VERY LOW	IMPORTANT
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CI: confidence interval; MD: mean difference; RR: risk ratio.

a. Most of the pooled effect provided by studies “B” or “C” but without a substantial proportion (i.e. < 50%) from studies “C”.

b. Intervention was mainly focused on prevention and not relief of pain.

c. Less than 400 participants.

d. Wide confidence interval crossing the line of no effect.

e. Less than 300 participants.