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Pain in Labour

Douleurs du travail : évaluation de l'acupuncture

Articles connexes : Traitements de référence

1. Systematic Reviews and Meta-Analysis

1.1. Generic Acupuncture

1.1.1. Smith 2020

Smith CA, Collins CT, Levett KM, Armour M, Dahlen H, Tan AL, Mesgarpour B. Acupuncture or acupressure for pain management during labour. Cochrane Database Syst Rev. 2020. [205261]. doi

Background	Many women would like to avoid pharmacological or invasive methods of pain management in labour and this may contribute towards the popularity of complementary methods of pain management. This review examined evidence about the use of acupuncture and acupressure for pain management in labour. This is an update of a review last published in 2011.
Objectives	To examine the effects of acupuncture and acupressure for pain management in labour.
Methods	SEARCH METHODS: For this update, we searched Cochrane Pregnancy and Childbirth's Trials Register, (25 February 2019), the Cochrane Central Register of Controlled Trials (the Cochrane Library 2019, Issue 1), MEDLINE (1966 to February 2019), CINAHL (1980 to February 2019), ClinicalTrials.gov (February 2019), the WHO International Clinical Trials Registry Platfory (ICTRP) (February 2019) and reference lists of included studies. SELECTION CRITERIA: Published and unpublished randomised controlled trials (RCTs) comparing acupuncture or acupressure with placebo, no treatment or other non-pharmacological forms of pain management in labour. We included all women whether nulliparous or multiparous, and in spontaneous or induced labour. We included studies reported in abstract form if there was sufficient information to permit assessment of risk of bias. Trials using a cluster-RCT design were eligible for inclusion, but quasi-RCTs or cross-over studies were not. DATA COLLECTION AND ANALYSIS: Two review authors independently assessed trials for inclusion and risk of bias, extracted data and checked them for accuracy. We assessed the certainty of the evidence using the GRADE approach.

Main Results	We included **28 trials** with data reporting on **3960 women**. Thirteen trials reported on acupuncture and 15 trials reported on acupressure. No study was at a low risk of bias on all domains. Pain intensity was generally measured on a visual analogue scale (VAS) of 0 to 10 or 0 to 100 with low scores indicating less pain. Acupuncture versus sham acupuncture Acupuncture may make little or no difference to the intensity of pain felt by women when compared with sham acupuncture (mean difference (MD) -4.42, 95% confidence interval (CI) -12.94 to 4.09, 2 trials, 325 women, low-certainty evidence). Acupuncture may increase satisfaction with pain relief compared to sham acupuncture (risk ratio (RR) 2.38, 95% CI 1.78 to 3.19, 1 trial, 150 women, moderate-certainty evidence), and probably reduces the use of pharmacological analgesia (RR 0.75, 95% CI 0.63 to 0.89, 2 trials, 261 women, moderate-certainty evidence). Acupuncture may have no effect on assisted vaginal birth (very low-certainty evidence), and probably little to no effect on caesarean section (low-certainty evidence). Acupuncture compared to usual care We are uncertain if acupuncture reduces pain intensity compared to usual care because the evidence was found to be very low certainty (standardised mean difference (SMD) -1.31, 95% CI -2.14 to -0.49, 4 trials, 495 women, I2 = 93%). Acupuncture may have little to no effect on satisfaction with pain relief (low-certainty evidence). We are uncertain if acupuncture reduces the use of pharmacological analgesia because the evidence was found to be very low certainty (average RR 0.72, 95% CI 0.60 to 0.85, 6 trials, 1059 women, I2 = 70%). Acupuncture probably has little to no effect on assisted vaginal birth (low-certainty evidence) or caesarean section (low-certainty evidence). Acupuncture compared to no treatment One trial compared acupuncture to no treatment. We are uncertain if acupuncture reduces pain intensity (MD -1.16, 95% CI -1.51 to -0.81, 163 women, very low-certainty evidence), assisted vaginal birth or caesarean section because the evidence was found to be very low certainty. Acupuncture compared to sterile water injection We are uncertain if acupuncture has any effect on use of pharmacological analgesia, assisted vaginal birth or caesarean section because the evidence was found to be very low certainty. Acupressure compared to a sham control We are uncertain if acupressure reduces pain intensity in labour (MD -1.93, 95% CI -3.31 to -0.55, 6 trials, 472 women) or assisted vaginal birth because the evidence was found to be very low certainty. Acupressure may have little to no effect on use of pharmacological analgesia (low-certainty evidence). Acupressure probably reduces the caesarean section rate (RR 0.44, 95% CI 0.27 to 0.71, 4 trials, 313 women, moderate-certainty evidence). Acupressure compared to usual care We are uncertain if acupressure reduces pain intensity in labour (SMD -1.07, 95% CI -1.45 to -0.69, 8 trials, 620 women) or increases satisfaction with pain relief (MD 1.05, 95% CI 0.75 to 1.35, 1 trial, 105 women) because the evidence was found to be very low certainty. Acupressure may have little to no effect on caesarean section (low-certainty evidence). Acupressure compared to a combined control Acupressure probably slightly reduces the intensity of pain during labour compared with the combined control (measured on a scale of 0 to 10 with low scores indicating less pain) (SMD -0.42, 95% CI -0.65 to -0.18, 2 trials, 322 women, moderate-certainty evidence). We are uncertain if acupressure has any effect on the use of pharmacological analgesia (RR 0.94, 95% CI 0.71 to 1.25, 1 trial, 212 women), satisfaction with childbirth, assisted vaginal birth or caesarean section because the certainty of the evidence was all very low. No studies were found that reported on sense of control in labour and only one reported on satisfaction with the childbirth experience.

Authors' Conclusions	Acupuncture in comparison to sham acupuncture may increase satisfaction with pain management and reduce use of pharmacological analgesia. Acupressure in comparison to a combined control and usual care may reduce pain intensity. However, for other comparisons of acupuncture and acupressure, we are uncertain about the effects on pain intensity and satisfaction with pain relief due to very low-certainty evidence. Acupuncture may have little to no effect on the rates of caesarean or assisted vaginal birth. Acupressure probably reduces the need for caesarean section in comparison to a sham control. There is a need for further high-quality research that include sham controls and comparisons to usual care and report on the outcomes of sense of control in labour, satisfaction with the childbirth experience or satisfaction with pain relief.

1.1.2. Chaillet 2014 ☆

Chaillet N, Belaid L, Crochetière C, Roy L, Gagné GP, Moutquin JM et al. Nonpharmacologic approaches for pain management during labor compared with usual care: a meta-analysis. Birth 2014;41(2):122-37. [171112].

Objectives	To assess the effects of nonpharmacologic approaches to pain relief during labor, according to their endogenous mechanism of action, on obstetric interventions, maternal, and neonatal outcomes.
Methods	Data Source: Cochrane library, Medline, Embase, CINAHL and the MRCT databases were used to screen studies from January 1990 to December 2012. Study Selection: According to Cochrane criteria, we selected randomized controlled trials that compared nonpharmacologic approaches for pain relief during labor to usual care, using intention-to-treat method.
Results	Nonpharmacologic approaches, based on Gate Control (water immersion, massage, ambulation, positions) and Diffuse Noxious Inhibitory Control (acupressure, acupuncture, electrical stimulation, water injections), are associated with a reduction in epidural analgesia and a higher maternal satisfaction with childbirth. When compared with nonpharmacologic approaches based on Central Nervous System Control (education, attention deviation, support), usual care is associated with increased odds of epidural OR 1.13 (95% CI 1.05-1.23), cesarean delivery OR 1.60 (95% CI 1.18-2.18), instrumental delivery OR 1.21 (95% CI 1.03-1.44), use of oxytocin OR 1.20 (95% CI 1.01-1.43), labor duration (29.7 min, 95% CI 4.5-54.8), and a lesser satisfaction with childbirth. Tailored nonpharmacologic approaches, based on continuous support, were the most effective for reducing obstetric interventions.
Conclusion	Nonpharmacologic approaches to relieve pain during labor, when used as a part of hospital pain relief strategies, provide significant benefits to women and their infants without causing additional harm.

1.1.3. Smith 2011 ☆ ☆

Smith CA, Collins CT, Crowther CA, Levett KM. Acupuncture or acupressure for pain relief in labour. Cochrane Database Syst Rev. 2011;(7):CD009232. [160371].

Purpose	To examine the effects of acupuncture and acupressure for pain management in labour.

Methods	We searched the Cochrane Pregnancy and Childbirth Group's Trials Register and The Cochrane Complementary Medicine Field's Trials Register (October 2010), the Cochrane Central Register of Controlled Trials (The Cochrane Library 2010, Issue 4), MEDLINE (1966 to October 2010), and CINAHL (1980 to October 2010). Published and unpublished randomised controlled trials comparing acupuncture and acupressure with placebo, no treatment or other non-pharmacological forms of pain management in labour. We included all women whether primiparous or multiparous, and in spontaneous or induced labour. We performed meta-analysis using risk ratios (RR) for dichotomous outcomes and mean differences (MD) for continuous outcomes. The outcome measures included pain intensity, satisfaction with pain relief, use of pharmacological pain relief, relaxation, caesarean section rate, augmentation with oxytocin, length of labour and anxiety.
Results	We included **13 trials with data reporting on 1986 women**. Nine trials reported on acupuncture and four trials reported on acupressure. Less intense pain was found from acupuncture compared with no intervention (standardised mean difference (SMD) -1.00, 95% confidence interval (CI) -1.33 to -0.67, one trial, 163 women). One trial increased satisfaction with pain relief compared with placebo control (RR 2.38, 95% CI 1.78 to 3.19, 150 women). Reduced use of pharmacological analgesia was found in one trial of acupuncture compared with placebo (RR 0.72, 95% CI 0.58 to 0.88, 136 women), and compared with standard care, however, there was significant heterogeneity (RR 0.68, 95% CI 0.56 to 0.83, three trials, 704 women). Fewer instrumental deliveries from acupuncture were found compared with standard care (RR 0.67, 95% CI 0.46, 0.98, three trials, 704 women). Pain intensity was reduced in the acupressure group compared with a placebo control (SMD -0.55, 95% CI -0.92 to -0.19, one trial, 120 women), and a combined control (SMD -0.42, 95% CI -0.65 to -0.18, two trials, 322 women). No trial was assessed as being at a low risk of bias for all of the quality domains.
Conclusion	**Acupuncture and acupressure may have a role with reducing pain, increasing satisfaction with pain management and reduced use of pharmacological management**.

1.1.4. Cho 2010 ☆

Cho SH, Lee H, Ernst E. Acupuncture for Pain Relief in Labour: A Systematic Review and Meta-Analysis. BJOG. 2010;117(8):907-20. [154015].

Objectifs	Acupuncture is frequently used for pain relief in labour, but the evidence is not clear. *Objectives*: To critically evaluate the evidence for or against acupuncture for labour pain management.
Méthodes	*Search Strategy*: Nineteen electronic databases, including English, Korean, Japanese, and Chinese databases, were systematically searched. *Selection Criteria*: All randomised controlled trials (RCTs) involving women receiving acupuncture alone, or as an adjunct to conventional analgesia, for pain relief in labour were considered. *Data Collection And Analysis*: Pain intensity on a 100-mm visual analogue scale (VAS; 0, no pain; 100, worst pain) and use of other analgesic methods were used as primary outcomes, and for statistical pooling. Maternal/fetal outcomes were secondary outcomes, and adverse events were also recorded. Risk of bias was assessed regarding randomisation, allocation concealment, blinding, incomplete outcome data, selective outcome reporting, and other biases.

Résultats	Ten RCTs involving 2038 women were included. VAS for pain intensity data were available in seven studies; the meta-analysis shows that acupuncture was not superior to minimal acupuncture at 1 hour (pooled mean difference -8.02; 95% CI -21.88, 5.84; I(2) = 94%) and at 2 hours (-10.15; 95% CI -23.18, 2.87; I(2) = 92%). Patients reported significantly reduced pain by 4 and 6% during electroacupuncture (EA) treatment at 15 (-4.09; 95% CI -8.05, -0.12) and 30 minutes (-5.94; 95% CI -9.83, -2.06), compared with placebo EA, but the effect was not maintained afterwards. Compared with no intervention, acupuncture reduced pain by only 11% for the first 30 minutes (-10.56; 95% CI -16.08, -5.03). In trials where acupuncture was compared with conventional analgesia, women receiving acupuncture required less meperidine (pooled risk ratio 0.20; 95% CI 0.12, 0.33) and other analgesic methods (0.75; 95% CI 0.66, 0.85). No acupuncture-related adverse events were reported. Most trials did not blind participants, care providers and/or evaluators.
Conclusion	The evidence from RCTs does not support the use of acupuncture for controlling labour pain. The primary studies are diverse and often flawed. Further research seems warranted.

1.1.5. Smith 2006 ☆

Smith CA, Collins CT, Cyna AM, Crowther CA. Complementary and alternative therapies for pain management in labour. Cochrane Database Syst Rev. 2006. [141481].
Smith C , Collins CT and Crowther C. Acupuncture and Acupressure for Pain Management in Labour: A Systematic Review. Australian Journal of Acupuncture and Chinese Medicine. 2007;2(1):25. [193067].

Background	Many women would like to avoid pharmacological or invasive methods of pain management in labour and this may contribute towards the popularity of complementary methods of pain management. This review examined currently available evidence supporting the use of alternative and complementary therapies for pain management in labour.
Objectives	To examine the effects of complementary and alternative therapies for pain management in labour on maternal and perinatal morbidity.
Methods	Search strategy: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (February 2006), the Cochrane Central Register of Controlled Trials (The Cochrane Library 2006, Issue 1), MEDLINE (1966 to February 2006), EMBASE (1980 to February 2006) and CINAHL (1980 to February 2006). Selection criteria: The inclusion criteria included published and unpublished randomised controlled trials comparing complementary and alternative therapies (but not biofeedback) with placebo, no treatment or pharmacological forms of pain management in labour. All women whether primiparous or multiparous, and in spontaneous or induced labour, in the first and second stage of labour were included. Data collection and analysis: Meta-analysis was performed using relative risks for dichotomous outcomes and mean differences for continuous outcomes. The outcome measures were maternal satisfaction, use of pharmacological pain relief and maternal and neonatal adverse outcomes.

Main results	Fourteen trials were included in the review with data reporting on 1537 women using different modalities of pain management; 1448 women were included in the meta-analysis. **Three trials involved acupuncture (n = 496),** one audio-analgesia (n = 24), **two trials acupressure (n = 172),** one aromatherapy (n = 22), five trials hypnosis (n = 729), one trial of massage (n = 60), and relaxation (n = 34). **The trials of acupuncture showed a decreased need for pain relief (relative risk (RR) 0.70, 95% confidence interval (CI) 0.49 to 1.00, two trials 288 women).** Women taught self-hypnosis had decreased requirements for pharmacological analgesia (RR 0.53, 95% CI 0.36 to 0.79, five trials 749 women) including epidural analgesia (RR 0.30, 95% CI 0.22 to 0.40) and were more satisfied with their pain management in labour compared with controls (RR 2.33, 95% CI 1.15 to 4.71, one trial). No differences were seen for women receiving aromatherapy, or audio analgesia.
Authors' conclusions	**Acupuncture and hypnosis may be beneficial for the management of pain during labour**; however, the number of women studied has been small. Few other complementary therapies have been subjected to proper scientific study.

1.1.6. Lee 2004 ☆

Lee HS, Ernst E. Acupuncture for labor pain management:A systematic review. American Journal of Obstetrics and Gynecology 2004;191:1573-9. [135560]

Background	Acupuncture is widely used to alleviate symptoms in a variety of painful conditions. In obstetrics and gynecology, acupuncture has also been applied to a range of conditions including labor pain.
Obejctive	This systematic review aims to critically evaluate the evidence on analgesic effect of acupuncture during labor.
Methods	Computerized literature searches of 7 databases were performed for randomized clinical trials (RCTs) of acupuncture involving needle insertion for pain during labor.
Results	Three RCTs were identified and their methodologic quality was generally good. Two RCTs compared adjunctive acupuncture with usual care only and reported a reduction of meperidine and/or epidural analgesia. One placebo acupuncture controlled trial showed a statistically significant difference in both subjective and objective outcome measures of pain. No adverse events were reported in any of the trials.
Conclusions	It is concluded that the evidence for acupuncture as an adjunct to conventional pain control during labor is promising but, because of the paucity of trial data, not convincing. Further research is warranted to clearly define its place in labor pain management.

1.1.7. Huntley 2004

Huntley AL, Thompson Coon J, Ernst E. Complementary and alternative medicine for labor pain: a systematic review. American Journal OF Obstetrics and Gynecology. 2004;191(1):36-44. [131593].

Objectives	The purpose of this study was to systematically review the literature for, and critically appraise, randomized controlled trials of any type of complementary and alternative therapies for labor pain.
Study design	Six electronic databases were searched from their inception until July 2003. The inclusion criteria were that they were prospective, randomized controlled trials, involved healthy pregnant women at term, and contained outcome measures of labor pain.

Results	Our search strategy found 18 trials. Six of these did not meet our inclusion criteria. The remaining 12 trials involved **acupuncture (2),** biofeedback (1), hypnosis (2), intracutaneous sterile water injections (4), massage (2), and respiratory autogenic training (1).
Conclusion	**There is insufficient evidence** for the efficacy of any of the complementary and alternative therapies for labor pain, with the exception of intracutaneous sterile water injections. For all the other treatments described it is impossible to make any definitive conclusions regarding effectiveness in labor pain control.

1.1.8. Smith 2003

Smith CA, Collins CT, Cyna AM, Crowther CA. Complementary and alternative therapies for pain management in labour. Cochrane Database Syst Rev. 2003. [187800].

Background	Many women would like to avoid pharmacological or invasive methods of pain management in labour and this may contribute towards the popularity of complementary methods of pain management. This review examined currently available evidence supporting the use of alternative and complementary therapies for pain management in labour.
Objectives	To examine the effectiveness of complementary and alternative therapies for pain management in labour on maternal and perinatal morbidity.
Methods	Search strategy: We searched the Cochrane Pregnancy and Childbirth Group trials register (July 2002), the Cochrane Controlled Trials Register (The Cochrane Library Issue 2, 2002), MEDLINE (1966 to July 2002), EMBASE (1980 to July 2002) and CINAHL (1980 to July 2002). Selection criteria: The inclusion criteria included published and unpublished randomised controlled trials comparing complementary and alternative therapies with placebo, no treatment or pharmacological forms of pain management in labour. All women whether primiparous or multiparous, and in spontaneous or induced labour, in the first and second stage of labour were included. Data collection and analysis: Meta-analysis was performed using relative risks for dichotomous outcomes and weighted mean differences for continuous outcomes. The outcome measures were maternal satisfaction, use of pharmacological pain relief and maternal and neonatal adverse outcomes.
Main results	Seven trials involving 366 women and using different modalities of pain management were included in this review. The trials included one involving acupuncture (n = 100), one involving audio-analgesia (n = 25), one involving aromatherapy (n = 22), three trials of hypnosis (n = 189) and one trial of music (n = 30). The trial of acupuncture decreased the need for pain relief (relative risk (RR) 0.56, 95% confidence interval (CI) 0.39 to 0.81). Women receiving hypnosis were more satisfied with their pain management in labour compared with controls (RR 2.33, 95% CI 1.55 to 4.71). No differences were seen for women receiving aromatherapy, music or audio analgesia.
Reviewer's conclusions	Acupuncture and hypnosis may be beneficial for the management of pain during labour. However, few complementary therapies have been subjected to proper scientific study and the number of women studied is small.

1.2. Special Acupuncture Techniques

1.2.1. Comparison of Acupuncture techniques

1.2.1.1. Yi 2024

Yi Y, Ju W, Fu D, Chen R, Bai X, Zhang S. Effect of traditional Chinese medicine therapy on labor pain in patients with natural childbirth: A network meta-analysis. Medicine (Baltimore). 2024 Oct 25;103(43):e39425. https://doi.org/10.1097/MD.0000000000039425

Backgound	This systematic review compared the efficacy of traditional Chinese medicine (TCM) treatments for outcomes of different stages and labor pain among pregnant women.
Methods	Eight databases were electronically searched for TCM on labor pain between January 2012 and January 2022. The studies were recorded and screened according to inclusion criteria and subsequently entered in Note Express. The quality of the included studies was evaluated using the Cochrane risk of bias tool, and network meta-analysis was conducted with Stata 16.0. Forest plots and league tables were used to compare different treatment modalities' effect sizes. Additionally, the probabilities of various treatment modalities for each outcome under the cumulative ranking curve were determined. The protocol was registered in PROSPERO (CRD42022336091). This study adhered to the Preferred Reporting Items for Systematic Reviews and Meta-analyses guidelines.
Results	Thirty articles encompassing 3277 participants were included in the network meta-analysis with 9 different treatment modalities. In terms of pain of labor at 30 minutes, **acupuncture** + autonomic nerve block was the most effective treatment modality. With regard to the 60-minute pain and the first stage of labor, **acupressure + acupuncture** therapy was most effective.
Conclusion	In general, a combined treatment with acupressure and acupuncture is the most effective approach for relieving labor pain and shortening the duration of labor. Based on these data, we intend to explore further clinical TCM therapy for relieving maternal pain.

1.2.2. Acupression

1.2.2.1. Chen 2021

Chen Y, Xiang XY, Chin KHR, Gao J, Wu J, Lao L, Chen H. Acupressure for labor pain management: a systematic review and meta-analysis of randomized controlled trials. Acupuncture in Medicine. 2021;39(4):243-252. [221969]. https://doi.org/10.1177/0964528420946044

Objective	To evaluate the efficacy/effectiveness of acupressure as an adjunct to standard procedures during labor and delivery, compared with standard procedures with/without sham acupressure, in randomized controlled trials (RCTs).
Methods	Ten main databases were searched from their inception until 31 January 2018. Two reviewers independently extracted data concerning the effects of acupressure on pain intensity, labor duration, mode of delivery, use of medications and adverse events. A meta-analysis of these measures was performed using RevMan 5.3. Pooled standardized mean differences (SMDs) or odds ratios (ORs) for the above outcomes were estimated with a fixed or random effects model, according to the heterogeneity.

Results	A total of **13 RCTs including 1586 enrolled patients** met the eligibility criteria. Acupressure plus standard procedures (ASP) for labor management significantly reduced pain sensation, compared with sham acupressure plus standard procedures (SASP) and standard procedures (SP) alone. The analgesic effect of acupressure was immediate and persisted for at least 60 min (all $p < 0.01$). Compared with the untreated control groups, the acupressure group had a shorter duration of labor, especially the first stage of labor (SMD = -0.76, 95% confidence interval (CI) = -1.10 to -0.43; $p < 0.001$; $I2 = 74\%$) and second stage of labor (SMD = -0.37, 95% CI = -0.59 to -0.18; $p < 0.001$; $I2 = 0\%$). Data suggesting that acupressure reduced the Cesarean section rate was inconclusive. The use of pharmacologic agents (oxytocin and analgesics) did not differ between the ASP, SASP and SP groups. No adverse events were reported in this limited number of studies.
Conclusion	Moderate evidence indicates that acupressure may have promising effects on labor pain and duration. However, high-quality trials to verify these findings are warranted.

1.2.2.2. Najafi 2017

Najafi F et al. An Evaluation of Acupressure on the Sanyinjiao (SP6) and Hugo (LI4) Points on the Pain Severity and Length of Labor: A Systematic Review and Meta analysis Study. Iranian Journal of Nursing and Midwifery Research. 2017;23(1):1-7. [174930].

Background	In this study, the effects of SP6 and LI4 acupressure on the pain severity and length of labor are examined.
Materials and Methods	This systematic review and meta-analysis study was performed on articles published in 2004–2015. The articles, published in the English and Farsi languages, related to the effects of acupressure on the SP6 and LI4 points on the length and pain severity of labor. Data were collected by searching medical databases, including PubMed, ISI, MagIran, Google Scholar, Iran Medex, SID, Irandoc, and EMBASE, for relevant material.
Results	Women who received SP6 acupressure experienced less pain immediately after the intervention [−0.56, 95% confidence interval (CI): −0.77, −0.36] than women in the touch group and exhibited decrease in the length of labor (−0.99, 95% CI: −1.39, −0.39), the active phase (0.95, 95% CI: −1.30, −0.61), and the second stage of labor (−0.39, 95% CI: −0.74, −0.03). Women who received LI4 acupressure experienced less pain immediately after the intervention (−0.94, 95%, CI: −1.36, −0.53) than women in the touch group and exhibited shorter active phase (−0.91, 95%, CI: −1.18, −0.63) and second stage of labor (−0.55, 95%, CI: −0.95, −0.15) lengths.
Conclusions	The use of SP6 and LI4 acupressure shows promise as a method for managing the length and pain severity of labor, but further study is required to establish its effectiveness along with other pharmacological and nonpharmacological methods.

1.2.3. TENS

1.2.3.1. Bedwell 2011 ☆

Bedwell C, Dowswell T, Neilson JP, Lavender T. The use of transcutaneous electrical nerve stimulation (TENS) for pain relief in labour: a review of the evidence. Midwifery 2011;27(5):e141-8. [155225].

Purpose	To assess the effects of transcutaneous electrical nerve stimulation (TENS) for pain relief in labour.

Methods	Studies were identified from a search of the Cochrane Pregnancy and Childbirth Group's Trials Register (November2008). Randomised controlled trials comparing women receiving TENS for pain relief in labour vs routine care or placebo devices. All types of TENS machines were included. Two review authors assessed all trials identified by the search strategy, carried out data extraction and assessed risk of bias.
Results	**14 studies including 1256 women** were included: 11 examined TENS applied to the back, **two to acupuncture points** and one to the cranium. Overall, there was little difference in satisfaction with pain relief or in pain ratings between TENS and control groups, **although women receiving TENS to acupuncture points were less likely to report severe pain (risk ratio 0.41, 95% confidence interval 0.32–0.55).** The majority of women using TENS would use it again in a future labour. There was no evidence that TENS had any impact on interventions and outcomes in labour. There was little information on outcomes for mothers and infants. No adverse events were reported.
Conclusion	**There is only limited evidence that TENS reduces pain in labour** and it does not seem to have any impact on other outcomes for mothers or infants. The use of TENS at home in early labour has not been evaluated. Although the guidelines of the National Institute for Health and Clinical Excellence recommend that TENS should not be offered to women in labour, women appear to be choosing it and midwives are supporting them in their choice. Given the absence of adverse effects and the limited evidence base, it seems unreasonable to deny women that choice.

1.2.3.2. Doswell 2009 ☆

Dowswell T, Bedwell C, Lavender T, Neilson JP. Transcutaneous Electrical Nerve Stimulation (tens) for pain relief in labour. Cochrane Database Syst Rev 2009;15(2):7214. [152666]

Purpose	Transcutaneous nerve stimulation (TENS) has been proposed as a means of reducing pain in labour. The TENS unit emits low-voltage electrical impulses which vary in frequency and intensity. During labour, TENS electrodes are generally placed on the lower back, although TENS may be used to stimulate acupuncture points or other parts of the body. The physiological mechanisms whereby TENS relieves pain are uncertain. The TENS unit is frequently operated by women, which may increase sense of control in labour. OBJECTIVES: To assess the effects of TENS on pain in labour.
Methods	SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (November 2008). SELECTION CRITERIA: Randomised controlled trials comparing women receiving TENS for pain relief in labour versus routine care, alternative pharmacological methods of pain relief, or placebo devices. We included all types of TENS machines. DATA COLLECTION AND ANALYSIS: Two review authors assessed for inclusion all trials identified by the search strategy, carried out data extraction and assessed risk of bias. We have recorded reasons for excluding studies.
Results	The search identified 25 studies; we excluded six and included **19 studies including 1671 women**. Fifteen examined TENS applied to the back, two to acupuncture points and two to the cranium. Overall, there was little difference in pain ratings between TENS and control groups, although women receiving TENS to acupuncture points were less likely to report severe pain (risk ratio 0.41, 95% confidence interval 0.32 to 0.55). The majority of women using TENS said they would be willing to use it again in a future labour. Where TENS was used as an adjunct to epidural analgesia there was no evidence that it reduced pain. There was no consistent evidence that TENS had any impact on interventions and outcomes in labour. There was little information on outcomes for mothers and babies. No adverse events were reported.

Conclusion	There is only limited evidence that TENS reduces pain in labour and it does not seem to have any impact (either positive or negative) on other outcomes for mothers or babies. The use of TENS at home in early labour has not been evaluated. TENS is widely available in hospital settings and women should have the choice of using it in labour.

2. Overviews of Systematic Reviews

2.1. Jones 2012

- Jones L, Othman M, Dowswell T, Alfirevic Z, Gates S, Newburn M, Jordan S, Lavender T, Neilson JP.. Pain Management for Women in Labour: An Overview of Systematic Reviews Cochrane Database Syst Rev. 2012;mar 14:CD009234.160360.

Pour l'acupuncture comporte la seule revue de Smith 2011

3. Clinical Practice Guidelines

⊕ positive recommendation (regardless of the level of evidence reported)
Ø negative recommendation (or lack of evidence)

3.1. National Institute for Health and Care Excellence (NICE, UK) 2023 Ø

Intrapartum care. London (UK): National Institute for Health and Care Excellence (NICE). 2023;129p. https://www.nice.org.uk/guidance/ng235/resources/intrapartum-care-pdf-66143897812933

Do not offer **acupuncture, acupressure** or hypnosis during labour. If a woman wants to use any of these techniques, support her choice. [2007, amended 2023]

3.2. Queensland Clinical Guidelines (Australia) 2023 ⊕

Queensland Clinical Guidelines. Intrapartum pain management. Guideline No. MN23.75-V1-R28. Queensland Health. 2023.
https://www.health.qld.gov.au/__data/assets/pdf_file/0014/1211126/g-intrapartum-pain.pdf

Acupuncture: May reduce pain and use of pharmacological options, whilst increasing maternal satisfaction. *Acupressure*: May reduce labour pain intensity, May shorten length of labour.

3.3. Australian and New Zealand College of Anaesthetists (ANZA) 2020 ⊕

Acute Pain Management: Scientific Evidence Australian and New Zealand College of Anaesthetists (ANZA). 2020:1317P. [205268] . URL.

1. Acupuncture and acupressure for labour pain may reduce pain, use of pharmacological pain relief and increase satisfaction with pain management versus standard care or placebo (Q) (Level I [Cochrane Review]); Caesarean section rates are unchanged (R) (Level I [Cochrane Review]).

3.4. German (DGGG), Austrian (OEGGG) and Swiss (SGGG) Societies of

Gynaecology and Obstetrics 2020 ⊕

Abou-Dakn M, Schäfers R, Peterwerth N, Asmushen K, Bässler-Weber S, Boes U, Bosch A, Ehm D, Fischer T, Greening M, Hartmann K, Heller G, Kapp C, von Kaisenberg C, Kayer B, Kranke P, Lawrenz B, Louwen F, Loytved C, Lütje W, Mattern E, Nielsen R, Reister F, Schlösser R, Schwarz C, Stephan V, Kalberer BS, Valet A, Wenk M, Kehl S. Vaginal Birth at Term - Part 1. Guideline of the DGGG, OEGGG and SGGG (S3-Level, AWMF Registry No. 015/083, December 2020). Geburtshilfe Frauenheilkd. 2022 Nov 3;82(11):1143-1193. https://doi.org/10.1055/a-1904-6546

Non-pharmacological interventions for pain relief and relaxation during childbirth. No adverse effects have been described for **acupuncture, acupressure**, hypnosis, aromatherapy and yoga. The wishes of the woman who wants to use these methods can be met. appropriate training of the user should be given. LoE 1+

3.5. Japan Academy of Midwifery (JAM, Japan) 2020 ⊕

Japan Academy of Midwifery [2020 evidence-based guidelines for midwifery care]. Nihon Josan GakkaiShi (J Jpn Acad Midwifery) . 2020;33(suppl) [in Japanese] . *Cited by* Okawa Y, Yamashita H, Masuyama S, Fukazawa Y, Wakayama I. Quality assessment of Japanese clinical practice guidelines including recommendations for acupuncture. Integr Med Res. 2022 Sep;11(3):100838. https://doi.org/10.1016/j.imr.2022.100838

Inform that acupuncture can be an option of relieving pains of the delivery.

3.6. American College of Obstetricians and Gynecologists (ACOG, USA) 2019 ~

ACOG Practice Bulletin No. 209 Summary: Obstetric Analgesia and Anesthesia. Obstet Gynecol. 2019;133(3):595-597. [193261]. doi

Nonpharmacologic options such as massage, immersion in water during the first stage of labor, **acupuncture**, relaxation, and hypnotherapy are not covered in this document, although they may be useful as adjuncts or alternatives in many cases.

3.7. Royal College of Obstetricians and Gynaecologists (RCOG, Royaume-Uni) 2019 ⊕

Bisson DL, Newell SD, Laxton C, on behalf of the Royal College of Obstetricians and Gynaecologists. Antenatal and Postnatal Analgesia. BJOG. 2019;126:E115-24. [197573]. doi

Non-pharmacological interventions should be considered first line; for example, adequate rest, hot and cold compresses, massage, **acupuncture**, physiotherapy, relaxation and exercise.

3.8. Academy of Breastfeeding Medicine (ABM, USA) 2018 ⊕

Martin E, Vickers B, Landau R, Reece-Stremtan S. ABM Clinical Protocol #28, Peripartum Analgesia and Anesthesia for the Breastfeeding Mother. Breastfeed Med. 2018;13(3):164-71. [198885].

Nonpharmacologic methods for pain management in labor such as hypnosis, massage, psychoprophylaxis, intradermal/subcutaneous water injections, and acupuncture have varying results in reducing labor pain. These methods appear to be safe and have no known adverse neonatal effects.

3.9. Society of Obstetricians and Gynaecologists of Canada (SOGC, Canada) 2018 ⊕

Bonapace J, Gagné GP, Chaillet N, Gagnon R, Hébert E, Buckley S. No. 355-Physiologic Basis of Pain in Labour and Delivery: An Evidence-Based Approach to its Management. J Obstet Gynaecol Can. 2018;40(2):227-245. [100247].

The Diffuse Noxious Inhibitory Control (which consists of applying painful stimulations at any site on the body for the duration of each painful contraction) is best achieved through acupressure, sterile water injections, or deep massage (I).

3.10. Queensland Health (QH, Australia) 2017 ⊕

Normal birth. Queensland Clinical Guidelines. 2017:42P. [196779].

Acupressure and acupuncture · May reduce pain in labour, increase maternal satisfaction with pain management and reduce pharmacological pain relief options · Acupressure may reduce the duration of first stage of labour.

3.11. Haute Autorité de Santé (HAS, France) 2017 ⊕

Accouchement normal : accompagnement de la physiologie et interventions médical. Recommandations de bonne pratique. Saint-Denis: Haute Autorité de Santé. 2017;:47P. Recommandations [59805] . Argumentaire scientifique [136733].

Interventions non médicamenteuses durant le premier stade du travail. Il est recommandé :
- que toutes les femmes puissent bénéficier d'un soutien continu, individuel et personnalisé, adapté selon leur demande, au cours du travail et de l'accouchement (grade A) ;
- de mettre en oeuvre les moyens humains et matériels nécessaires permettant aux femmes de changer régulièrement de position afin d'améliorer leur confort et de prévenir les complications neurologiques posturales (AE).
Les données issues de la recherche scientifique aujourd'hui sont peu nombreuses et de faible niveau de preuve sur de nombreuses interventions non médicamenteuses de prise en charge de la douleur. Cependant, la plupart des interventions semblent inoffensives pour la mère et l'enfant. Il est donc souhaitable d'accompagner les femmes dans leur choix en termes de moyens non médicamenteux qu'elles souhaiteraient, tant que ceux-ci n'altèrent pas la surveillance maternelle ou foetale (AE).
Parmi les nombreuses méthodes proposées, certaines techniques telles que l'immersion, la relaxation, **l'acupuncture**, les massages ou l'hypnose pourraient être efficaces **(NP3**). D'autres études sont à mener. La sophrologie est également à évaluer pendant le travail.

3.12. Société des Obstétriciens et Gynécologues du Canada (SOGC, Canada) 2016 ⊕

Lee L, Dy J, Azzam H. Prise en charge du travail spontané chez les femmes en santé, à terme. J Obstet Gynaecol Can. 2016;38(9):866-90. [165478].

Une revue systématique Cochrane de 2006 sur les thérapies complémentaires et parallèles pour la prise en charge de la douleur du travail a révélé que l'autohypnose et l'acupuncture peuvent contribuer à atténuer la douleur. Cependant, les résultats de l'étude ont été limités par la petite taille de l'échantillon.
Recommandations : Lorsque cela est approprié, les prestataires de soins de santé devraient soutenir les femmes dans leur choix concernant les méthodes analgésiques à utiliser pendant le travail, qui pourraient comprendre des mesures pharmacologiques et non pharmacologiques. (III-A) 9. Chaque femme devrait recevoir, avant le début du travail, des renseignements fondés sur des données probantes concernant les options d'analgésie pendant le travail. Par ailleurs, on devrait lui laisser tout le temps nécessaire pour discuter des risques et des avantages de chaque option disponible à l'unité où elle doit accoucher. (III-A)

3.13. King Edward Memorial Hospital 2016 (KEMH, Australia) ⊕

Labour Pain Management Acupuncture. King Edward Memorial Hospital (KEMH), Government of Western Australia. 2016. [164477].

There have been no reported adverse outcomes with acupuncture in labour,although there is potential risk of infection. Acupuncture has been shown to aid relaxation, allowing women to have more control and management of their labour pain.Acupuncture may cause some physical limitations for women in labour

3.14. Australian and New Zealand College of Anaesthetists (ANZCA, Autralia-New Zealand) 2015 ⊕

Acute Pain Management: Scientific Evidence. Australian and New Zealand College of Anaesthetists. 2015:714P. [196721].

Acupuncture and acupressure for *labour pain* reduces pain, use of pharmacological pain relief, Caesarean delivery rates and may increase satisfaction with pain management compared to standard care or placebo (S) (Level I [Cochrane Review]).

3.15. National Institute for Health and Care Excellence (NICE, Grande-Bretagne) 2014 Ø

National Collaborating Centre for Women's and Children's Health. Intrapartum care: care of healthy women and their babies during childbirth. London (UK): National Institute for Health and Care Excellence (NICE),. 2014; : 108p. [165223].

Do not offer acupuncture, acupressure or hypnosis, but do not prevent women who wish to use these techniques from doing so. [2007]

3.16. Academy of Breastfeeding Medicine (Internat) 2012 ⊕

Montgomery A, Hale TW, The Academy of Breastfeeding Medicine. ABM Clinical Protocol #15: Analgesia and Anesthesia for the Breastfeeding Mother, Revised 2012. Breastfeed Med. 2012 Dec;7:547-53. [165014].

Nonpharmacologic methods for pain management in labor such as hypnosis and **acupuncture** have been found effective in reducing labor pain.

3.17. British Columbia Perinatal Health Program (BCPHP, Canada) 2007 ⊕

Pain Management Options During Labour. British Columbia Perinatal Health Program. 2007:30P. [197051].

Acupuncture and hypnosis may help relieve labour pain,