

Titel: Effects of LI4 and SP6 acupressure on labor Pain: A systematic review and meta-analysis of randomized controlled trials protocols.

Name: Haifa Almalki

Academic Institution: PhD students at Michigan State University

Stage in the program: A student

Abstract

Background: Pain management remains a critical aspect of the childbirth process. Acupressure offers a non-invasive, low-cost intervention, and has gained attention for its possibility to alleviate labor pain.

Aim: This systematic review and meta-analysis aim to evaluate the effects of acupressure at LI4 and SP6 points on labor pain.

Methods: A comprehensive search of electronic databases identified 11 studies assessing acupressure at LI4 and SP6. Meta-analyses were conducted using standardized mean differences (SMDs) and 95% confidence intervals (CIs) for labor pain. Secondary outcomes were synthesized narratively.

Results: The analysis included 870 participants. Acupressure significantly reduced labor pain (SMD = -1.61; 95% CI: [-2.25, -0.97], $p < 0.0001$). Subgroup analysis showed greater pain relief with LI4 (SMD = -2.24; 95% CI: [-3.10, -1.39]) compared to SP6 (SMD = -0.74; 95% CI: [-1.28, -0.20]). Heterogeneity across studies was high ($I^2 > 80\%$). Secondary findings included reductions in labor duration (up to 1 hour), anxiety, and improvements in maternal comfort and β -endorphin levels.

Conclusions: Acupressure at LI4 and SP6 significantly reduces labor pain and provides additional benefits such as shortened labor duration and improved comfort. Despite heterogeneity, these findings support the integration of acupressure as a complementary technique for pain management. Further, intervention protocols need to be standardized, and their applicability should be evaluated in different settings.

Keywords: Acupressure, labor pain, LI4, SP6, non-pharmacological pain management, systematic review, meta-analysis.