

Effect of Acupressure on Menstrual Pain and Associated Symptoms

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Abstract

Menstrual pain, particularly primary dysmenorrhea, is a common problem among women of reproductive age and may be accompanied by nausea, fatigue, headache, dizziness, mood changes, and limitations in daily activities. Although analgesic medication is commonly used, interest has increased in non-pharmacological and complementary approaches. Acupressure is a non-invasive technique involving manual stimulation of selected points and has been investigated for menstrual pain and related symptoms. This paper reviews the effect of acupressure on menstrual pain and associated symptoms, focusing on proposed mechanisms, commonly used approaches, evidence from randomized trials and systematic reviews, effects on symptom severity and quality of life, safety, and research limitations. Recent evidence, including a 2025 systematic review and meta-analysis of 23 randomized controlled trials, indicates that acupressure may reduce menstrual pain compared with placebo acupressure, oral medication, and usual treatment, although the authors rated the overall evidence as low quality. Earlier systematic reviews also reported potential improvements in pain and some menstrual symptoms, while emphasizing methodological limitations. Acupressure may therefore be considered a complementary option within broader dysmenorrhea management, but it should not replace appropriate clinical assessment or established treatment when symptoms are severe or persistent.

Keywords

Acupressure; Menstrual Pain; Primary Dysmenorrhea; Menstrual Symptoms; Complementary Therapy; Pain Management; Women's Health

Introduction

Menstrual pain, clinically referred to as dysmenorrhea when associated with menstruation, is a common health concern among women of reproductive age. Primary dysmenorrhea occurs in the absence of an identifiable pelvic pathology and commonly presents as cramping lower abdominal pain that may radiate to the back or thighs. Associated symptoms can include nausea, vomiting, diarrhea, headache, fatigue, dizziness, and emotional distress. These symptoms may interfere with education, employment, social participation, and everyday activities.

Conventional management commonly includes analgesic medicines and hormonal approaches, depending on the individual's circumstances. However, some women seek complementary methods because of medication concerns, preferences for non-drug interventions, or the desire to use additional strategies for symptom control. Acupressure is a non-invasive method that applies pressure to specific points and may be used as a complementary intervention.

Evidence concerning acupressure for dysmenorrhea has developed over several years. An early systematic review identified randomized trials suggesting that acupressure could alleviate menstrual pain, but noted limitations in the number and quality of studies. A later review of randomized trials reported improvements in pain and some menstrual symptom measures, while again highlighting methodological weaknesses. More recently, a 2025 systematic review and meta-analysis included 23 randomized controlled trials and found statistically significant reductions in menstrual pain compared with several control conditions, although the overall evidence was considered low quality.

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The purpose of this paper is to review the effect of acupressure on menstrual pain and associated symptoms. The discussion considers the nature of dysmenorrhea, the concept of acupressure, possible mechanisms, commonly used approaches, evidence for pain reduction, effects on associated symptoms and quality of life, safety, limitations, and implications for future research.

1. Menstrual Pain and Primary Dysmenorrhea

Primary dysmenorrhea is characterized by painful menstruation without an underlying pelvic disease. Pain is often strongest during the first days of menstruation and may be accompanied by systemic symptoms. The severity and duration vary between individuals, and recurrent symptoms can create a considerable burden.

Because dysmenorrhea affects both physical comfort and daily functioning, effective management should consider more than pain intensity alone. Measures such as symptom severity, medication use, school or work absence, and quality of life can provide a broader picture of treatment effectiveness.

2. Concept and Principles of Acupressure

Acupressure involves applying manual pressure to selected points on the body. It is historically related to acupuncture and other traditional East Asian practices but differs from acupuncture because it does not use needles. Pressure may be applied with the thumb, finger, or an appropriate non-invasive device according to a defined protocol.

Research protocols vary in the points selected, pressure intensity, duration, timing within the menstrual cycle, and frequency of treatment. This variation can influence study outcomes and makes standardized reporting important.

3. Possible Mechanisms of Action

Several mechanisms have been proposed to explain how acupressure may influence menstrual pain. Manual stimulation may activate sensory pathways involved in pain modulation and may contribute to relaxation or changes in autonomic responses. Some research has also proposed effects involving endogenous pain-regulating processes.

Psychological and contextual factors may contribute as well. A structured intervention can provide focused attention, relaxation, and a sense of active participation in symptom management. These factors may influence perceived pain even when the specific physiological mechanisms remain uncertain.

4. Effect of Acupressure on Menstrual Pain

Pain intensity is the most frequently studied outcome in acupressure research on dysmenorrhea. A 2013 systematic review of randomized clinical trials reported improvements in visual analogue scale pain outcomes and some follow-up measures, although the authors noted methodological limitations. [\[cite turn0search1\]](#)

More recent evidence is encouraging. A 2025 systematic review and meta-analysis of 23 randomized controlled trials found that acupressure reduced menstrual pain compared with placebo acupressure, oral medication, and usual treatment. The pooled results favored acupressure, but the authors emphasized that the overall certainty of evidence was low and that better-designed studies are needed. [\[cite turn0search0\]](#)

5. Effect on Associated Menstrual Symptoms

Menstrual discomfort extends beyond abdominal pain. Nausea, fatigue, headache, dizziness, gastrointestinal symptoms, and emotional changes may accompany dysmenorrhea. Therefore, an intervention may have practical value if it reduces the overall symptom burden rather than pain alone.

Evidence regarding associated symptoms is mixed. Earlier reviews reported improvements in some symptom measures at longer follow-up periods, while other comparisons did not show clear differences immediately after treatment. A 2023 meta-analysis of auricular acupressure found reductions in symptom scores, although heterogeneity was substantial. [\[cite turn0search4 turn0search3\]](#)

6. Acupressure and Quality of Life

Recurrent menstrual pain can affect physical activity, concentration, attendance at school or work, and social participation. Consequently, quality of life is an important secondary outcome. A systematic review examining acupuncture and acupressure for primary dysmenorrhea found evidence of pain relief from acupressure but emphasized the need for higher-quality randomized and sham-controlled trials. [\[cite turn0search7\]](#)

Potential improvements in quality of life may occur when reductions in pain and associated symptoms allow individuals to maintain normal activities. However, such improvements should be measured directly rather than inferred solely from pain scores.

7. Common Acupressure Approaches and Points

Acupressure studies for dysmenorrhea use different combinations of points. Points frequently discussed in research and traditional practice include Sanyinjiao (SP6), Hegu (LI4), Neiguan (PC6), and other points selected according to the intervention protocol. Auricular acupressure uses selected points on the ear and has also been investigated in randomized trials.

The choice of points and treatment schedule varies substantially. For this reason, research papers should report the location of points, duration of pressure, treatment frequency, and timing relative to menstruation. This information is necessary for reproducibility and meaningful comparison.

8. Safety and Practical Considerations

Acupressure is generally considered non-invasive, and reported adverse events in the available dysmenorrhea literature appear limited. The 2025 systematic review noted that adverse events were reported in only two included studies and were mild. □cite□turn0search0□

Nevertheless, pressure should be applied appropriately and should not be used over injured, infected, inflamed, or otherwise compromised areas. Acupressure should not delay medical assessment when menstrual pain is unusually severe, newly developed, progressively worsening, or associated with other concerning symptoms. Persistent or severe dysmenorrhea may require evaluation for secondary causes.

9. Limitations of Current Evidence and Future Research

The evidence base has several limitations. Studies differ in sample size, pressure points, treatment duration, control conditions, outcome measures, and methodological quality. Earlier systematic reviews specifically highlighted weaknesses in randomization, allocation concealment, and reporting, while more recent reviews continue to describe much of the evidence as low quality. □cite□turn0search1□turn0search0□

Future studies should use larger samples, rigorous randomization, credible sham controls, standardized acupressure protocols, validated pain and symptom scales, and longer follow-up. Researchers should also distinguish clearly between manual body acupressure and auricular acupressure because the interventions and evidence bases are not identical.

Conceptual Framework

The following conceptual framework presents a simplified pathway through which acupressure may influence menstrual pain and associated symptoms. Intervention characteristics and participant factors may modify the observed outcomes.

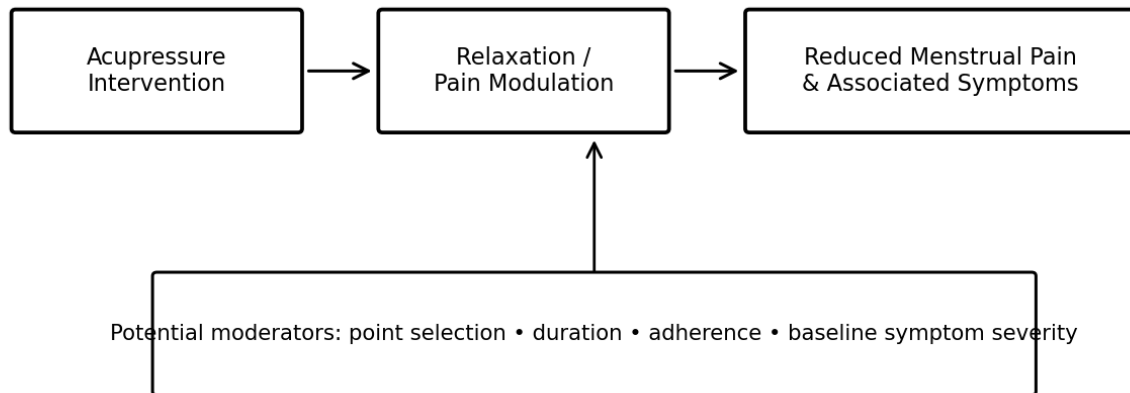


Figure 1. Conceptual framework showing the potential relationship between acupressure and menstrual pain outcomes.

Conclusion

Acupressure appears to have potential as a complementary approach for reducing menstrual pain and, in some studies, associated symptoms of primary dysmenorrhea. Recent evidence is more encouraging than earlier literature, with a 2025 systematic review and meta-analysis reporting statistically significant reductions in menstrual pain across several comparison groups. However, the authors rated the overall quality of evidence as low, and methodological limitations remain important. □cite□turn0search0□ Acupressure may therefore be considered as one component of a broader approach to menstrual pain management. Its non-invasive nature and potential for repeated use may make it acceptable to some women, but it should not replace appropriate diagnosis and evidence-based care, particularly when symptoms are severe or persistent.

Further high-quality research is required to establish standardized protocols, clarify effects on associated symptoms and quality of life, and identify the individuals most likely to benefit. Better-designed trials will help determine the clinical significance and long-term sustainability of acupressure for dysmenorrhea.

References

Yu, X., Liu, B., Li, J., Gao, Y., Chen, J., Qi, R., Yuan, Y., & Liu, Y. (2025). Efficacy and safety of acupressure for primary dysmenorrhea: A systematic review and meta-analysis of randomized controlled trials. *Complementary Therapies in Medicine*, 95, 103272. <https://doi.org/10.1016/j.ctim.2025.103272>

Smith, C. A., Armour, M., Zhu, X., Li, X., Lu, Z. Y., & Song, J. (2016). Acupuncture for dysmenorrhoea. Cochrane Database of Systematic Reviews, 2016(4), CD007854.

Yang, M., Chen, X., Bo, L., Lao, L., Chen, J., Yu, S., Yu, Z., Tang, H., Zhang, L., & Liu, H. (2017). Moxibustion for pain relief in patients with primary dysmenorrhea: A systematic review and meta-analysis. Evidence-Based Complementary and Alternative Medicine, 2017, 8246059.

Cho, S. H., & Hwang, E. W. (2010). Acupuncture for primary dysmenorrhoea: A systematic review. BJOG: An International Journal of Obstetrics & Gynaecology, 117(5), 509–521.

Kong, X., et al. (2023). Effects of auricular acupressure on dysmenorrhea: A systematic review and meta-analysis of randomized controlled trials. Frontiers in Endocrinology, 13, 1016222. <https://doi.org/10.3389/fendo.2022.1016222>

Smith, C. A., Crowther, C. A., Petrucco, O. M., & Beilby, J. (2011). Acupuncture to treat primary dysmenorrhea in adolescent girls: A randomized controlled trial. PLOS ONE, 6(10), e25770.

Zhu, X., Proctor, M., Bensoussan, A., Smith, C. A., & Wu, E. (2008). Chinese herbal medicine for primary dysmenorrhoea. Cochrane Database of Systematic Reviews, 2008(2), CD005288.