



The Efficacy of Acupressure on the Intensity of Extracorporeal Shock Wave Lithotripsy Pain: A Systematic Review Study

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Abstract

Background and Aims: Extracorporeal shock wave lithotripsy is a widely used treatment for kidney stones. However, it is important to provide pain relief to patients during the procedure. Recently, physicians have been exploring non-pharmacological methods - specifically acupressure - to alleviate pain in patients undergoing medical procedures, such as lithotripsy. This study aims to review the findings of studies in this area.

Method: A systematic search was carried out in various scientific databases such as PubMed/Medline, Scopus, Web of Science, and Google Scholar to locate clinical trials published in English. Additionally, Irandoc, SID, and Magiran databases were searched for studies published in Persian. The search was restricted to the years 2000 to 2024. The search terms used were "Acupressure", "pain", "Extracorporeal shock wave lithotripsy", "lithotripsy", "Auriculotherapy", "Clinical trial", and "Experimental study", which were combined using appropriate Boolean operators like AND and OR. Studies that were published in languages other than English and Persian, expert opinions, conference abstracts, case reports, studies without full text, and qualitative studies were excluded from the review. A checklist was used to evaluate and validate the clinical trial studies.

Results: After screening several studies, it was found that acupressure therapy is effective in relieving pain when compared to control groups. However, one of the studies did not report any clinically significant difference in pain intensity among patients, although the therapy did have notable effects on physiological parameters. These studies also suggested that extracorporeal shock wave lithotripsy had an increase in participant satisfaction and a potential impact on the success of kidney stone treatment.

Conclusion: Complementary and alternative medicine techniques, such as acupressure, have shown promising results in relieving pain in patients undergoing medical procedures and pain management interventions such as extracorporeal shock wave lithotripsy. Therefore, it is recommended that acupressure be used in conjunction with pharmacological treatments as an easy, simple, and accessible option during these procedures.

Keywords: Acupressure, pain, kidney stones, extracorporeal shock wave lithotripsy, systematic review