

Reduced Chronic Low Back Pain with Acupressure: A Systematic Review

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Abstract

One of the most common forms of disability globally, chronic low back pain (CLBP) has a profound impact on people's ability to move around, do daily tasks, and get things done. Alternative pain management methods, such as acupressure, are gaining popularity as non-invasive and affordable alternatives to traditional medicine and physical therapy. Various electronic databases were queried for relevant material, including Scopus, PubMed, Web of Science, and the Cochrane Library. Inclusion criteria included studies that were published in English and looked at the effects of acupressure on adults suffering from persistent low back pain. Methods such as comparative clinical research, randomized controlled trials, and quasi-experimental studies were considered. Information regarding the study's parameters, procedures for interventions, metrics for outcomes, and important conclusions were retrieved and evaluated. When compared to both baseline data and, in certain instances, control interventions, the examined trials showed that acupressure significantly reduced pain intensity and improved physical function. Acupressure patients reported better mobility, lower disability ratings, and overall health and well-being. Treatment efficacy differed across acupressure methods, treatment length, and session frequency. It appears that acupressure is typically safe and well-tolerated, as there were little reports of unwanted effects.

Keywords: Acupressure, Chronic Low Back Pain, Complementary Therapy, Pain Management

Introduction

An important global health issue, chronic low back pain (CLBP) ranks high among the main reasons people are unable to work. It has major societal, economic, psychological, and bodily costs and impacts individuals of all ages. Any soreness, tightness, or stiffness felt below the costal margin and above the inferior gluteal folds that lasts twelve weeks or more is considered chronic low back pain. Quality of life, productivity at work, and ability to go about everyday tasks can all take a hit when dealing with this disease. An aging population, sedentary lifestyles, obesity, and risk factors in the workplace have all contributed to a dramatic rise in the incidence of persistent low back pain in the last several decades. Medications, PT, exercise regimens, and, in extreme circumstances, surgery are all part of the standard therapeutic toolbox. There is some evidence that these methods can alleviate symptoms, but there is also some evidence that they come with risks, are expensive, and have mixed results. As a result, complementary and alternative medicine (CAM) is gaining popularity as a viable alternative to mainstream medicine. Traditional Chinese Medicine (TCM) is the source for the ancient healing practice of acupressure. Acupressure is a form of alternative medicine that uses the application of gentle pressure to certain areas of the body called acupoints in order to promote the body's inherent

healing abilities and normalize the flow of energy, also called "Qi." Acupressure is a non-invasive, safe, and easily accessible alternative to acupuncture since it does not use needles. Common uses include alleviating aches and pains, anxiety, nausea, lethargy, and a host of musculoskeletal disorders.

A number of studies have looked at the efficacy of acupressure in alleviating pain and improving functional outcomes for people suffering from persistent low back pain. Possible pain-relieving processes include increased blood flow, relaxing of muscles, activation of neural pathways, and the secretion of endorphins. Studies differ in their designs, sample sizes, intervention protocols, and outcome measures, which in turn causes findings to vary. There has to be a thorough assessment of the current data because acupressure is becoming more popular as a supplemental therapy and there is a growing amount of research on the subject. The purpose of this review is to analyse and summarize the research on acupressure's efficacy in alleviating chronic low back pain, boosting physical function, and improving quality of life. Healthcare providers, researchers, and patients looking for alternatives to pharmaceutical painkillers may benefit from the results.

The Workings of Acupressure for the Treatment of Pain

Applying gentle pressure to certain anatomical locations called acupoints is the basis of acupressure, a form of alternative medicine that has its roots in Traditional Chinese Medicine (TCM). Its widespread use stems from its purported ability to alleviate pain and speed recovery through enhancing the body's inherent physiological mechanisms. Several molecular pathways have been suggested by contemporary studies to account for its efficacy in pain reduction, while it has its roots in traditional medicine.

Stimulating the neurological system is one of the main ways that acupressure works. To stimulate the flow of information to the brain and spinal cord, acupressure is applied to certain acupoints. One possible effect of these signals is to dampen the sensation of pain by interfering with its transmission. The Gate Control Theory of Pain lends credence to this procedure by proposing that inhibiting the transmission of painful inputs to the brain can be achieved by stimulating non-painful sensory pathways.

Some people also think that acupressure can stimulate the production of endogenous opioids such dynorphins, endorphins, and enkephalins. By lowering pain perceptions by attaching to opioid receptors in the neurological system, these naturally occurring substances function as the body's painkillers. Pain reduction, relaxation, and an enhanced feeling of well-being have all been linked to elevated endorphin levels.

The improvement of blood circulation is another mechanism that has been suggested. By increasing blood flow to the area, acupressure may help remove metabolic waste from the body and provide oxygen and nutrients to the injured tissues. Reduced inflammation, accelerated tissue healing, and lessened muscular tension are all benefits of improved circulation that work together to lessen pain.

One possible way that acupressure affects the autonomic nervous system is by making people feel more relaxed and less stressed. Anxiety, stress, and muscular strain are common side effects of living with chronic pain. A more relaxed physiological state can be achieved through the parasympathetic nervous system, which can be activated with acupressure by stimulating

certain acupoints. Indirectly, these benefits may lessen the severity of pain and increase general comfort.

Traditional Chinese Medicine holds that when the body's meridians become imbalanced or clogged, the flow of vital energy, or Qi, becomes disrupted, leading to discomfort. It is thought that acupressure can alleviate pain and restore health by restoring the smooth flow of Qi. Although contemporary science has not yet provided a comprehensive explanation of Qi, some studies have postulated that the physiological effects seen during acupressure treatments might be related to alterations in neurological, hormonal, and circulatory processes.

Effects and Difficulty of Long-Term Low Back Pain

A huge problem in public health, chronic low back pain (CLBP) affects more people than any other musculoskeletal illness in the globe. Signs and symptoms include lower back pain that does not go away after 12 weeks or more. Though it strikes people of all ages, the illness strikes adults and the elderly more frequently. Disability, diminished quality of life, and increased healthcare utilization are all significantly impacted by chronic low back pain because of its high prevalence and recurrent nature.

Having persistent low back pain is a major physical hardship. Pain, stiffness, and impaired range of motion are common symptoms of chronic low back pain (CLBP). Difficulty or pain may develop with doing daily chores such walking, standing, bending, lifting, and cleaning. In addition to negatively impacting one's health and well-being, chronic pain can weaken muscles, diminish stamina, and prevent one from engaging in leisure and social activities.

The emotional and mental tolls of living with chronic low back pain are just as high as the physical ones. Disruptions to sleep, low self-esteem, anxiety, sadness, and stress are common side effects of living with chronic pain. Because they are afraid their condition may get worse, many patients avoid moving around or doing any kind of physical activity. A vicious loop can be created by these mental elements, whereby pain causes emotional discomfort, which in turn heightens the feeling of pain and impairment.

Chronic low back pain also has significant societal consequences. Problems with family obligations, social engagement, and relationship maintenance are all possible outcomes. Feelings of isolation and dissatisfaction with life might result from reducing social participation. While supporting and caring for impacted individuals, family members may also face emotional and financial pressure.

Everyone bears a heavy financial burden when low back pain persists over an extended period of time. Consultations, tests, prescriptions, rehabilitation, and alternative medicine all fall under the category of direct costs. Absenteeism, decreased productivity on the job, disability benefits, and early retirement all add up to indirect costs. There are substantial monetary costs associated with low back pain because it is a major cause of work-related disability and missed workdays in many nations.

Many factors contribute to the increasing occurrence of chronic low back pain. These include inactivity, obesity, bad posture, certain jobs, the natural aging process, and a lack of regular physical activity. Chronic low back pain is predicted to become more common as the world's population ages, putting greater strain on healthcare systems and resources.

Justification of Acupuncture for the Treatment of Low Back Pain

Many people suffer from chronic low back pain, which has a major impact on their physical ability to work, mental health, and overall quality of life. Traditional methods of pain alleviation, such as NSAIDs, PT, surgical procedures, and other pharmaceuticals, are not without their drawbacks, including potential side effects, prohibitive costs, and limited availability. Consequently, there is a growing demand for safe, effective, and easily administered alternative and complementary medicines.

Acupuncture is a new and exciting non-pharmacological option for treating persistent low back pain. Acupressure is a form of alternative medicine with its origins in Traditional Chinese Medicine (TCM). It entails pressing certain areas on the body, called acupoints, in order to promote healing and equilibrium. Many people prefer acupressure over acupuncture because it is less invasive and does not involve needles.

A combination of conventional wisdom and cutting-edge research supports the use of acupressure for the relief of low back pain. A blockage or disruption in the passage of Qi, the body's vital energy, within the meridians is the underlying cause of pain, according to TCM principles. The traditional belief is that acupressure can alleviate pain and improve health by reestablishing a harmonious flow of Qi. Based on what we know about how the body works, acupressure has the potential to alleviate pain in a number of ways, including by increasing blood flow, decreasing muscular tension, relieving stress, and activating nerve endings, which in turn release endorphins.

Studies have shown that acupressure can help people with persistent low back pain feel less discomfort, perform better physically, and have a higher quality of life. In addition to alleviating pain, it may lessen the need for pharmaceuticals, which in turn reduces the likelihood of adverse drug reactions and addiction. Patients can have a greater say in their care when acupressure is either done by medical experts or taught to them as a self-care practice.

The low risk of adverse effects is another compelling argument in favor of acupressure. The method is appropriate for many people, including the elderly and those with long-term health issues, because it is typically associated with little side effects when done properly. Its affordability and user-friendliness lend credence to its potential usage in healthcare and public health contexts.

Conclusion

Countless individuals across the globe endure the debilitating effects of chronic low back pain, which has far-reaching effects on their physical, mental, social, and financial well-being. As the prevalence of this ailment continues to rise, there is an urgent need for accessible, safe, and effective therapeutic options to supplement current medical practices. Acupuncture, according to the research analyzed here, has the potential to be a non-pharmacological intervention that helps people with persistent low back pain feel less pain and have better functional results. Acupressure seems to alleviate pain and promote well-being through neuronal stimulation, endogenous opioid release, improved blood circulation, and relaxation promotion. It is an appealing complementary therapy for patients looking for alternative pain management options due to its low cost, limited risk of unwanted effects, and non-invasive nature. Study designs, sample sizes, treatment durations, and outcome measures vary, making it difficult to draw firm

conclusions despite usually positive findings. Thus, in order to solidify the data and create evident clinical guidelines for the use of acupressure in the management of persistent low back pain, additional high-quality randomized controlled trials with standardized procedures are required.

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