

Frozen Shoulder Therapy using Acupuncture

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Abstract

Introduction: A frozen shoulder is a medical condition that causes pain and stiffness in the shoulder, limiting mobility and daily activities. Traditional therapy is not always effective, so acupuncture therapy is an alternative that can improve joint function and mobility. **Objective:** The purpose of this study was to determine the benefits of acupuncture therapy in cases of frozen shoulders. **Method:** The research method used is a case study with a pre-post test design. The research sample consisted of five patients with frozen shoulder. **Result and Discussion:** The therapy was carried out three times, and the acupuncture points used were LI 15, LI 14, SI 9, SI 10, SI 11, SI 12, and GV16. The variables observed were the level of pain and stiffness in the shoulder before and after acupuncture therapy. **Conclusion:** The results showed that acupuncture therapy for treating frozen shoulder showed significant changes, with an average previous VAS scale of 4.8 to 0.6, so it can be concluded that acupuncture has been proven effective as an alternative therapy for frozen shoulder cases.

Keywords: Acupuncture; Frozen Shoulder; VAS;

Introduction

Frozen shoulder is a medical condition in which a person experiences difficulty and pain moving their shoulder. This disease is commonly experienced by individuals aged 40–60 years and often attacks and affects only one shoulder. This disease is often called "Fifty Shoulders" because it is very often experienced by people around the age of 50 (Zhang, 2009). Ministry of Health in frozen shoulder, there is usually a pathological process in which contractures of the glenohumeral capsule occur. In Indonesia, especially in Jakarta and its surroundings, there are many cases of frozen shoulder in people over 50 years old. (Septiano, 2023).

Frozen shoulder occurs from a few months to about two years, and the pain may diminish to varying degrees over time. Shoulder activity will also gradually recover (Eljabu et al., 2016). Various pathological processes from various institutions have been carried out, and it can be concluded that the condition of frozen shoulder can be divided into three phases: the acute phase, the adhesion phase, and the remission phase (Ma, 2012).

Frozen shoulder, also known as adhesive capsulitis, is a condition in which the shoulder becomes stiff and painful (Pandey and Madi, 2021). The scale of pain in cases of frozen shoulder varies from individual to individual and can be further categorized into various subcategories, such as primary Frozen shoulder, Secondary Frozen shoulder, and Diabetic Frozen shoulder (Cho et al., 2019).

Inflammation and hardening of the tissues around the joint capsule of the shoulder can result in a lack of joint fluid to lubricate and help the joint move. Factors such as injury, surgery, or systemic conditions such as diabetes can also exacerbate the condition of frozen shoulder cases (Brauer, 2013). Pain in a frozen shoulder is generally concentrated in the shoulder and upper arm area and can feel worse at night (Lu and Lu, 2013). This pain often gets worse when performing certain shoulder movements or when using the hands and upper arms (Zhang, 2009).

The pain scale for frozen shoulders often uses a visual analog pain scale, or VAS. This scale is a horizontal line with a starting point of "no pain" and an end point of "very severe pain" (Sardar, 2015). Patients are asked to point to a point on the line that corresponds to their pain level. The VAS scale is often used to evaluate pain levels before and after treatment or intervention in research (Kahl and Cleland, 2005). Traditional treatment for frozen shoulder includes education, exercise therapy, manual mobilization, electrotherapy, drugs, injections, physiotherapy, and even surgery in the hospital (Nakandala et al., 2021). However, many sufferers are still looking for safer and more effective alternative therapies; one alternative that is much sought after by patients with this disease is acupuncture therapy (Brauer, 2013).

Method

This research uses a case study method with a pre-post-test design. Pre-post, design collects data at two different times: before the intervention is carried out (pre-test) and after the intervention (post-test). The data collected at both times was then compared to see the differences that occurred after the intervention was carried out (Sugiyono, 2011).

The variables observed were the level of pain and stiffness in the shoulder before and after acupuncture therapy. Pain was measured using the VAS scale. The research sample consisted of five patients who suffered from frozen shoulders. The therapy is carried out three times; in one session, acupuncture therapy is carried out for 30–45 minutes. The acupuncture points used were LI 15, LI 14, SI 9, SI 10, SI 11, SI 12, and GV16.

Result and Discussion

Result

The five respondents experienced similar complaints, namely shoulder pain, and all were diagnosed with frozen shoulders. The genders of the respondents are 2 women and 3 men. To measure the pain scale felt by respondents, the VAS scale was used. Measurements were taken before therapy, after therapy 1, after therapy 2, and after therapy 3. Results of frozen shoulder therapy:

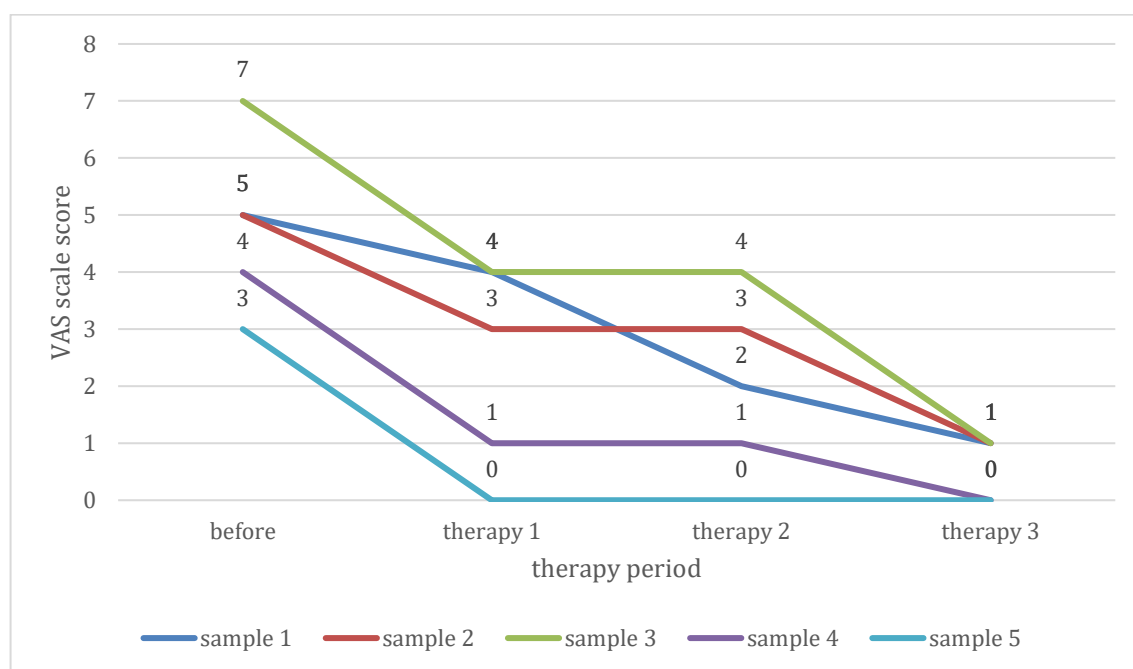


Figure 1 Graph of VAS pain scale reduction as a result of therapy

In Figure 1, the pain scale of all samples decreased from before therapy to the last therapy.

Discussion

Some of the factors that make this therapy successful include the first prick at the right acupuncture point according to the point needed. Pinpointing the right point can stimulate the nervous system and affect the flow of energy in the body, which causes inflammation, reduces pain, improves blood circulation, and improves joint mobility in the area needed. Factors determining points, frequency of therapy, and duration of

acupuncture sessions for each individual also have a strong influence on the success of therapy.

The selection of the right acupuncture points also helps to overcome frozen shoulder disorders. Acupuncture points used to treat frozen shoulders:

1. Jianyu (LI 15) This point is located on the outer surface of the shoulder, between the shoulder and the upper arm. This point is known to be useful for relieving pain, stiffness, and tension in the shoulder.
2. Binau (LI 14) acupuncture point on the upper arm, located between the shoulder and upper arm muscles, on the outer side of the arm. This point is often used to treat shoulder and neck problems.
3. Jianzhen (SI9) acupuncture point, located on the top of the shoulder, above the end of the shoulder blade (acromion). This point is used to relieve shoulder pain and shoulder joint stiffness.
4. Naoshu (SI10) is located on the shoulder, at a point parallel to the shoulder blade. This point is often used for shoulder pain and frozen shoulders.
5. Tianzong (SI 11), the point of crossing the line connecting the tip of the shoulder (acromion) and the scapula (scapula).
6. This point is often used to treat shoulder and neck pain, inflammation of the shoulder joint, numbness in the arms and hands, and headaches.
7. Bingfeng (SI 12) is located under the shoulder, on the lower edge of the scapula (scapula). This point is used to treat shoulder stiffness, inflammation of the shoulder joint, and inflammation of the shoulder tendons.
8. Fengfu (GV 16) located in the middle of the neck, between the two vertebrae; this point is used for headaches and neck stiffness.

In figure 1, which shows changes in the VAS (Visual Analog Scale) scale of each individual, there is a significant decrease in the VAS value in each therapy session. In the first session, the average individual VAS score decreased from 4.8 (moderate pain) to 2.4 (mild pain). In the second session, there was a decrease from 3.6 (moderate pain) to 2.0 (mild pain), and in the third session, the VAS value decreased from 1.6 (mild pain) to 0.6 (mild pain and almost no pain).

These changes indicate that acupuncture therapy can gradually reduce pain levels in frozen shoulder cases. All sessions showed the largest decrease in pain level on the VAS scale, indicating the effectiveness of acupuncture therapy in overcoming the case. Overall, it can be concluded that acupuncture therapy resulted in a very significant individual average reduction in pain from before the first session to after the third session. Thus, acupuncture therapy proved effective in overcoming cases of frozen shoulder in the individuals studied.

Conclusion

The results showed that all individuals experienced improvement from the first to the third session, with a consistent decrease in pain levels based on the VAS scale. The results showed that acupuncture therapy to treat frozen shoulders showed significant changes, with an average previous VAS scale of 4, 8, or 0.6. So it can be concluded that acupuncture has been proven effective as an alternative therapy for frozen shoulder cases.

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