**Article Full Title**

The Efficiency of Manual Therapy and Sacroiliac and Lumbar Exercises in Patients with Sacroiliac Joint Dysfunction Syndrome

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**Paper Abstract**

Background: Manual therapy, exercise therapy, and the combination of these 2 are common treatments for sacroiliac joint dysfunction syndrome (SIJDS). The effects of these treatments have been discussed in several studies; the superiority of one over the other for patients with sacroiliac joint dysfunction syndrome is still the subject of discussion. Objective: This study aims to assess the effects of manual therapy for sacroiliac joints, sacroiliac joints home-based exercises, and home-based lumbar exercises. Study Design: A comparative, prospective, single-blind, randomized, controlled trial. Setting: This trial was conducted at a single center at the Istanbul University, Istanbul Medical Faculty, Department of Physical Medicine and Rehabilitation. Methods: Within the scope of this study, 69 women diagnosed with sacroiliac joint dysfunction syndrome through specific sacroiliac joints clinical diagnostic tests were randomized into 3 groups. The first group was assigned manual therapy and a sacroiliac joints home-based exercise program (n = 23), the second group was assigned sacroiliac joints manual therapy and a home-based lumbar exercise program (n = 23), and the third group was assigned a home-based lumbar exercise program (n = 23). All patients who participated in the study were evaluated at the beginning of the study and on the twenty-eighth and ninetieth day.

**NIH Risk of Bias Tool**

Quality Assessment of Controlled Intervention Studies

1. **Was the study described as randomized, a randomized trial, a randomized clinical trial, or an RCT**

Yes

1. **Was the method of randomization adequate (i.e., use of randomly generated assignment)?**

Yes

1. **Was the treatment allocation concealed (so that assignments could not be predicted)?**

Yes

1. **Were study participants and providers blinded to treatment group assignment?**

No

1. **Were the people assessing the outcomes blinded to the participants' group assignments?**

Cannot Determine, Not Reported, or Not Applicable

1. **Were the groups similar at baseline on important characteristics that could affect outcomes (e.g., demographics, risk factors, co-morbid conditions)?**

Yes

1. **Was the overall drop-out rate from the study at endpoint 20% or lower of the number allocated to treatment?**

Yes

1. **Was the differential drop-out rate (between treatment groups) at endpoint 15 percentage points or lower?**

Yes

1. **Was there high adherence to the intervention protocols for each treatment group?**

Yes

1. **Were other interventions avoided or similar in the groups (e.g., similar background treatments)?**

No

1. **Were outcomes assessed using valid and reliable measures, implemented consistently across all study participants?**

Yes

1. **Did the authors report that the sample size was sufficiently large to be able to detect a difference in the main outcome between groups with at least 80% power?**

Yes

1. **Were outcomes reported or subgroups analyzed prespecified (i.e., identified before analyses were conducted)?**

Yes

1. **Were all randomized participants analyzed in the group to which they were originally assigned, i.e., did they use an intention-to-treat analysis?**

Yes

**Key Finding #1**

Both groups with manipulation had better results than just exercise alone, and SIJ exercises were found to be more effective than lumbar exercises.

**Key Finding #2**

All three groups revealed significant improvement in pain scale and physical examination findings.

**Key Finding #3**

Most of the 5 SIJDS tests that Group 1 was positive on the 28th to 90th day follow ups were significantly lower than Group 2 and 3.

**Key Finding #4**

Most of the 5 SIJDS tests that were Group 2 positive on the 28th and 90th day follow ups were significantly lower than Group 3.

**Please provide your summary of the paper**

This study aimed to determine the effectiveness between different types of exercises with manipulations, versus only implementing one type of exercise. Though there were already listed limitations to this study (purposefully only enrolling women, not having a healthy control population), not having a manipulation only group seems to further limit this study and their goal for determining the efficiency of the SIJ manipulation. The authors appeal to and dissect a list of other studies in their discussion to showcase different benefits of various manipulation/exercise interventions to possibly overcome this limitation though. Overall, the results of the study suggest that combining manipulations with exercises for interventions seems to provide better results than exercises alone, with SIJ specific exercises seeming to report the best results.

**Please provide your clinical interpretation of this paper. Include how this study may impact clinical practice and how the results can be implemented.**

Though this study might not compare manipulation to exercises directly, the study suggests that manipulations in conjunction with exercises produces improved benefit to just exercises alone. This finding can help enhance treatments and improve long term function for to patients, especially in more non-specific realms like SIJ.