**Article Full Title**

Evaluating the Effectiveness of Soft Tissue Therapy in the Treatment of Disorders and Postoperative Conditions of the Knee Joint -- A Systematic Review

**Author Names**

Jurecka, A , Papiez, M , Skucinska, P , Gadek, A

**Reviewer Name**

Semat Adekoya, SPT

**Reviewer Affiliations**

Duke University School of Medicine, Doctor of Physical Therapy Division

**Paper Abstract**

The term "soft tissue therapy" (STT) refers to mechanical methods of treatment involving passive kneading, pressing and stretching of pathologically tense tissues in supporting the process of recovery after surgery or trauma to the musculoskeletal system. The objective of this study was to review current scientific reports evaluating the effectiveness of the use of STT in patients with diseases or after surgical procedures of the knee joint. A systematic search of the popular scientific databases PubMed, Scopus and Embase was performed from inception to 15 October 2021. Eight articles met eligibility criteria and were included in the review. Six papers were related to disorders of the knee joint, while the remaining two studies were related to dysfunctions associated with the conditions after surgical intervention. The findings presented confirmed the effectiveness of STT in orthopaedic patients who showed an increase in lower limb functional parameters. The research has shown that the use of various methods of STT has a significant impact on increasing muscle activity and flexibility as well as increasing the range of motion in the knee joint. The physiotherapeutic methods used had a significant impact on reducing pain and increasing physical function and quality of life. The techniques used reduced the time to descend stairs in patients with knee osteoarthritis. This review summarises the effectiveness of STT as an important form of treatment for orthopaedic patients with various knee joint dysfunctions.

**NIH Risk of Bias Tool**

Quality Assessment of Systematic Reviews and Meta-Analyses

**Is the review based on a focused question that is adequately formulated and described?**

Yes

**Were eligibility criteria for included and excluded studies predefined and specified?**

Yes

**Did the literature search strategy use a comprehensive, systematic approach?**

Yes

**Were titles, abstracts, and full-text articles dually and independently reviewed for inclusion and exclusion to minimize bias?**

Yes

**Was the quality of each included study rated independently by two or more reviewers using a standard method to appraise its internal validity?**

Yes

**Were the included studies listed along with important characteristics and results of each study?**

**Was publication bias assessed?**

Cannot Determine, Not Reported, Not Applicable

**Was heterogeneity assessed? (This question applies only to meta-analyses.)**

Cannot Determine, Not Reported, Not Applicable

**Key Finding #1**

The applied Soft Tissue Therapy techniques significantly increased the ROM of the knee joint.

**Key Finding #2**

The applied Soft Tissue Therapy techniques significantly reduced knee joint pain

**Key Finding #3**

After the application of manual therapy, there was a significant reduction in the results of subscales: pain, stiffness, and function

**Key Finding #4**

**Please provide your summary of the paper**

Many studies were analyzed in this systematic review over a 12 year span and brought forth the following results following studies conducted on 228 orthopedic patients. First, the application of soft tissue therapy increased range of motion at the knee joint. Another study demonstrated the increase in flexibility of the hamstring and iliotibial band following soft tissue mobilization techniques. Soft tissue therapy proved to significantly reduce knee joint pain in the majority of subjects, with a few noting no change and one person disclosing a worsening pain. Lastly, after the application of manual therapy techniques, there was a reduction in pain, stiffness, and an increase in function.

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

Research shows manual therapy and soft tissue therapy are effective in the treatment in post-operative orthopedic conditions and diseases. This systematic analysis focused on the knee as it is the "most exposed to pathological loads", but is applicable to other portions of the body as well. These methods, although effective, should be paired with other treatment including physical therapy and exercise in order to maximize results