

Effect of stretching program of hamstring muscles on low back pain among surgeon in operation theatre

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Abstract

Background: Many people struggle with hamstring (HM) stretches. They are a muscle group that tightens up quickly and depending on your posture can be overworked. The hamstrings run through the back of each thigh. Tightness in this muscle limits motion in the pelvis which can increase stress across the low back and corrupt correct posture and can cause the onset of knee or back pain. Hamstring stretching exercises are a necessary part of training in any sport and are useful in the maintenance of good posture. I observe after treating of many surgeons in our hospital a relation between tightness of HM and back pain especially after OT work. **Methods:** Ten participants from different surgical departments (plastic surgery department, orthopaedic Dept. etc.) were asked to do Hamstring Muscle Tightness test. They were chosen from Al Qassimi hospital, Sharjah, UAE. They were assigned to one group and practiced a program of Stretching Program of Hamstring Muscles daily for 2 weeks. All participants had been evaluated to measure Hamstring Muscle Tightness test and all participants with positive Hamstring Muscle Tightness test were enrolled in this study. All participants were asked to do Visual analogue scale test. All data were registered in data collection sheets.

Keywords: Stretching; Hamstring; Functional Disability

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Introduction

All measurements were done before and after the study program. **Results:** After completion of the study, a significant improvement was observed in measurement of back pain on visual analogue scale ($P < 0.05$), when compared to pre-program measurement. **Conclusion:** Stretching exercises Program of Hamstring Muscles could improve Low Back Pain among Surgeon in Operation Theatre. Stretching Program of Hamstring Muscles is good methods that improve Low Back Pain among Surgeon.

Bend forward at the waist, arms hanging down toward the ground, and legs straight, without locking the knees, while standing. Try to touch your toes, but don't strain. When you feel a tiny pulling feeling in your hamstring, stop bending forward. This type of exercise is not always recommended because it can be difficult to perform and can even aggravate discomfort from a lumbar herniated disc, spondylolisthesis, or other problems.

On patients with radicular lower back pain, hamstring stretching and nerve mobilisation are performed, and changes in pain levels, pressure thresholds, angles of knee joint extension, and disorder levels of lower back pain are examined. Four individuals had their implants partially removed.

[Subjects and Procedures] The individuals were divided into two groups: one group performed hamstring stretches and included 6 male and 5 female patients, while the other group got nerve mobilisation treatment and included 5 male and 6 female subjects. [Results] In both groups, the intervention dramatically reduced pain levels and the disorder score of lower back pain. Both groups' pressure thresholds and angles of knee extension rose significantly following the intervention. When comparing the two groups, the nerve mobilisation group experienced more pain relief.

After therapy, patients with radicular lower back pain demonstrated significant differences in pain level, pressure threshold, knee extension angle, and disorder index of lower back pain for both the hamstring stretching group and the nerve mobilisation group. Hamstring stretching and nerve mobilisation can be beneficial in the treatment of people suffering from radicular lower back pain.

Lower back pain can be caused by a variety of factors, including innate, traumatic, inflammatory, degenerative, oncotic, metabolic, and organic pain. Furthermore, alterations in body alignment and continuous movement are recognised as general risk factors for lower back pain. Changes in muscle flexibility have a direct impact on the epidemiologically related functions of other joints, and decreases in joint range of motion induce epidemiologic changes that result in joint function disorders. When muscle alterations and posture are out of balance, forward pelvic tilting happens commonly during pelvic transposition due to a weaker or loose hamstring muscle. When the body bends forward, the shearing stress on the front section of the spine increases, increasing the risk of spinal injury. reduced hamstring muscle flexibility increases the risk of injury due to the greater stress placed on the spine during the bending position. Because lower back pain is more common when the

lower spine muscles and hamstring muscles contract, hamstring flexibility exercises are effective treatments for lower back pain.

In recent years, there has been an increase in the number of treatments available for Low Back Pain (LBP). Opioids, spinal injections, bed rest, skin traction, and surgery are the most commonly used treatments. National clinical practise guidelines, on the other hand, place less emphasis on pharmacological and surgical treatments. Non-surgical Spinal Decompression (NSD) is a new, though still experimental, non-surgical therapy option for LBP. The purpose of this paper was to examine the outcome of LBP utilising the NSD approach provided by an Intervertebral Differential Dynamics Therapy (IDDT) device in conjunction with other conservative treatments.

NSD and other typical conservative therapy could result in statistically significant improvements in LBP. Long-term follow-up after NSD is required.

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