

Coexistence of Low Back Pain and Hamstring Tightness; We Should Not Stretch Every Hamstring

Bel Ağrısı ve Hamstring Gerginliği Birlikteliği; Her Hamstringi Germemeliyiz

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Dear Editor;

Low back pain is a very common condition and is the fifth most common reason for seeking medical attention in the US.¹ Low back pain is usually mechanical in nature. Conditions related to the spine, intervertebral discs, and surrounding soft tissues can be counted among the causes of mechanical low back pain.² It has been reported that hamstring tension, one of the conditions related to soft tissues, may cause low back pain. Tight hamstring muscles may decrease lumbar lordosis and may be a predisposing factor for low back pain. Tightness in the hamstring muscles is also effective on lumbar pelvic rhythm.³

In the static standing position, five muscle groups, including the erector spinae, hamstrings, gluteus maximus, abdominals, and hip flexors, are re-

sponsible for supporting and protecting the pelvis, and pelvic rhythm is impaired in functional disorders of these muscles.⁴ The shortening of the abdominal muscles, hip extensors, and hamstring muscles causes a decrease in posterior pelvic tilt and lordosis; as a result of the tension of the hip flexor muscles and erector spinae muscles, an increase in anterior pelvic tilt and lordosis occurs. Lumbar hyperlordosis is usually associated with anterior pelvic tilt. Hyperlordosis has been reported to be a major cause of postural pain, radiculopathy, and facet pain. In individuals with hyperlordosis and anterior pelvic tilt, tension may occur in the hamstring muscles to prevent the pelvis from tilting forward and reduce the load on the spine. This may cause hamstring tissue strains and injuries.⁵

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As a general approach, individuals who feel tension in their hamstring muscles are advised to stretch their hamstring muscles. However, this is not correct in all cases. In patients with increased anterior pelvic tilt and lordosis, the hamstring muscles are stretched to reduce the load on the spine due to impaired pelvic rhythm. In this case, hamstring stretching exercises in patients with anterior pelvic tilt and increased lordosis who complain of hamstring tension are not a rational approach and may cause an increase in lordosis and increase the forward tilt of the pelvis. Instead, it would be more appropriate to strengthen the hamstring muscles and stretch the muscles that cause increased lordosis and anterior pelvic tilt, which are the main causes of the problem, in order to regain pelvic rhythm in these individuals.⁵

In conclusion, we aimed to raise awareness through this paper. In patients with low back pain with hamstring tension, it may be rational to give an appropriate exercise programme to the individual after a lumbar-pelvic evaluation based on a review of anatomical research.⁵

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