

# POSTERIOR SACROILIAC JOINT LIGAMENTS AND THEIR POTENTIAL INFLUENCE ON THE LOW BACK AND PELVIC PAIN

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**T**he sacroiliac joint (SIJ) is structured by articular surfaces between the sacral and iliac bones. The SIJ embraces different functions, because it connects the spine with pelvis, which permits the soaking up of vertical forces from spine and thus, transferring vertical forces to the pelvis and lower extremities. The first goal of the SIJ is to preserve stability that is partly done by the muscles surrounding the SIJ and realized by various procedures, encompassing a large complex of ligaments connected to the SIJ. The range of motion of the SIJ is evaluated to be around 2 to 4 degrees. 35 muscles connected to the sacrum bone or innominate work together in synergy with the fascia and ligaments to produce movement and ensure stability of the trunk and lower extremities. The SIJ is an important source of pelvic and low back pain (LBP), which should be taken into consideration in the differential diagnosis of pelvic and LBP. The prevalence of SIJ pain tends to be underappreciated because no research has been done concerning the SIJ posterior ligaments. In the United States and the rest of the world, there is an increased prevalence of LBP and its associated costs. In Europe, the augmentation of LBP cases in an adult population is due to sedentary activities such as working with a computer. We have conducted a pilot study composed of 20 patients. After applying two different osteopathic release techniques on the posterior SIJ ligaments, a reduction of the pain was observed in 18 patients, from which 12 had no pain anymore and six had only a reduction of the intensity of pain. In two cases, the applied techniques did not produce any effect. There is a necessity to investigate the potential function of SIJ posterior ligaments at generating LBP.

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