



## Implications of the Sacroiliac Joint Posterior Ligaments and Cluneal Nerves in the Differential Diagnosis of Low Back and Pelvic Pain

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The sacroiliac joints (SIJs) are known to be a critical cause of low back pain (LBP) [1] and contained between two bony structures, iliac bones, the iliac, and sacral bone [2]. The SIJ is surrounded by an extensive network of ligaments [2]. Besides, thirty-five muscles are fixing on the SIJs, from the lower limb, pelvis, and trunk [3]. The SIJs are involved in essential costs related to impairment for people affected by LBP and SIJs pain [4].

The gold standard for treating SIJ pain is the injection of corticoids because of the assumption that SIJ pain comes from the joint [5]. Nonetheless, the pain-free effect did not last over eight weeks. One reason could be that the different SIJs parts involved in the ligaments' irritation [6].

Another reason for missing the target treatment for LBP or SIJ pain could be the prevalence of diagnostic errors due to the repetitive procedures of diagnostic and statistically well documented [4]. Physicians' self-confidence is another potential source of diagnostic errors [7]. The integration of the cluneal nerves entrapment syndromes could be an additional factor for missing the correct diagnosis of the SIJs' pain causes [8,9] and providing the right adapted treatment.

Clinicians must integrate during the differential diagnosis issues of SIJ and LBP to analyze the different anatomical structures through an accurate physical examination [10], such as the posterior SIJ ligaments and the cluneal nerves. One of the keys for providing the correct diagnosis and the adapted treatment for the patient with SIJ or LBP requires all clinicians to adopt a meticulous

analysis of the anatomical structures concerned, focusing on the posterior SIJ ligaments, thus not only on bony structures.

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