Entrapment of the cluneal nerves as a forgotten cause of low back pain and leg symptoms

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The causes of low back pain (LBP) can be complex and it is often difficult to get an accurate diagnosis. The concept of a relationship between the cluneal nerve and LBP is not new. Following reports by Maigne et al. in 1989 describing that the most medial branch of the superior cluneal nerve (SCN) may become entrapped where the nerve passes through the fascia over the iliac crest, surgeries were undertaken for irritative SCN neuropathy to open the fascial orifice with successful outcomes. Recently, clunealgia has become known as an under-diagnosed cause for chronic LBP or leg pain. We reported that patients with SCN disorders comprised 12% of all patients presenting with a chief complaint of LBP and/or leg symptoms in our clinic and approximately 50% of SCN disorder patients had leg pain and/or tingling. There are several anatomical variations in the running courses of the SCN. On the other hand, entrapment of the middle cluneal nerve (MCN) within the long posterior sacroiliac ligament (LPSL) has been sporadically suggested as a potential cause of LBP and peripartum pelvic pain. In my experience, SCN entrapment is often associated with MCN entrapment. MCN entrapment under the LPSL is a potentially under-diagnosed cause of chronic LBP. Knowledge of this clinical entity would avoid unnecessary spinal surgeries and sacroiliac joint fusion. SCN and/or MCN blocks are useful not only for obtaining pain relief, but also to confirm the diagnosis by pain relief after injection.

Biography
Yoichi Aota has completed his PhD from Yokohama City University and Postdoctoral studies from Rush-Presbyterian - St. Luke’s Medical Center, Chicago. He is the Director of department of spine & spinal cord surgery of Yokohama Brain and Spine Center and a visiting Professor of Yokohama City University and Tokyo Medical University. He has published more than 40 papers in reputed journals and has been serving as an Editorial Board Member of repute.

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