The superior cluneal nerve (SCN) is formed by the cutaneous branches of the dorsal rami of T11-L4 and supplies skin over the buttocks. The first detailed description focusing SCN and low back pain (LBP) was made by Strong and Davila in 1957. Though the chief complaint was limited to LBP in their series, patients also had referred pain in leg. Maigne and Sato described referring LBP preferably in and around iliac crest may develop following dermatomes of corresponding cutaneous dorsal rami; pressure on the iliac crest reproduces pain corresponding to the exit of the SCN. According to researchers, medial branch of the SCN passing through an osteofibrous tunnel between thoracolumbar fascia and iliac crest might get entrapped and generated symptoms following its course. Moreover, 39% of the SCN medial branches travel through the tunnel and only 5% of them exhibited macroscopically apparent entrapment. Strong and Davila reported that the prevalence of SCN disorder was 9.8% of LBP sufferers.

Sometimes, SCN disorder patients are significantly older and have more vertebral fractures in the thoracolumbar or lumbar spine, eliciting pre-existing either asymptomatic or subclinical SCN entrapment over the iliac crest by irritation of the SCN at its origin from unstable facet joints due to increased kyphosis of the spine. Strong and Davila used diagnostic criteria for SCN disorder; a constant tender point no larger than 2 cm in diameter was situated in the low lumbar or spine. The superior cluneal nerve (SCN) is formed by the cutaneous branches of the dorsal rami of T11-L4 and supplies skin over the buttocks. The first detailed description focusing SCN and low back pain (LBP) was made by Strong and Davila in 1957. Though the chief complaint was limited to LBP in their series, patients also had referred pain in leg. Maigne and Sato described referring LBP preferably in and around iliac crest may develop following dermatomes of corresponding cutaneous dorsal rami; pressure on the iliac crest reproduces pain corresponding to the exit of the SCN. According to researchers, medial branch of the SCN passing through an osteofibrous tunnel between thoracolumbar fascia and iliac crest might get entrapped and generated symptoms following its course. Moreover, 39% of the SCN medial branches travel through the tunnel and only 5% of them exhibited macroscopically apparent entrapment. Strong and Davila reported that the prevalence of SCN disorder was 9.8% of LBP sufferers.

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It is not unlikely that the lumbar motion limitation and leg complaints could lead to misdiagnosis and unnecessary spine surgeries. However, characteristic painful limping and restricted lumbar motion differ from those seen in spine conditions. Tightening buttocks often aggravates pain while ambulation, suggesting that constriction of the gluteus muscles squeezes the SCN at the fascial orifice. Patients often realize that compressing above the iliac crest with hands reduced symptoms. Symptoms often aggravates during flexion. Coupling rotation to contralateral side and flexion further aggravates symptoms. Sometimes, flexion and contralateral rotation strain the SCN. Besides, patients with SCN disorder often reports aggravated symptoms on lumbar spine extension. These characteristic signs are useful as a provocative examination maneuver to screen and differentiate SCN disorders from lumbar disorders. Patients having true sciatica due to spinal canal or foraminal lesion generally have gluteal regions (Valleix’s points) tenderness. Nevertheless, iliac crest tenderness can also be seen in sciatica, but it would not reproduce leg symptoms as like as SCN. So, how to approach it? Superior cluneal nerve blocks have some diagnostic and therapeutic value. In
spite of pain provocation while injecting, SCN blocks to be mandatory for accurate diagnosis and control of intractable symptoms; effective in curbing short-term symptoms. In some patients, surgery requires releasing SCN constriction under the thoracolumbar fascia tightly attached over the bony groove on the ilium and selecting these patients as surgical candidate would improve overall surgical outcome.

In fine, SCN disorder, is an example of extraspinal sciatica and sometimes pain physicians might get confused it with lumbar spinal stenosis, piriformis syndrome, etc. because of similar clinical mimicries. So, accurate diagnosis of SCN is priceless here, otherwise unwanted spine interventions may pose patients in life-long sufferings.

REFERENCES


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