

Pudendal Nerve Neuropathy: An Unknown-Rare Cause of Pelvic Pain

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Pudendal neuropathy is a rare entrapment neuropathy that is not well known in the diagnosis and differential diagnosis of pelvic pain. Pudendal nerve emerges from S2, S3, S4 nerve fibers and carries sensory information from perineal and genital organs.¹ Pudendal nerve can be compressed when it passes between sacrotuberous and sacrospinous ligaments or within the Alcock canal.² Pudendal nerve neuropathy can occur due to factors like pregnancy, fall, chronic constipation, direct trauma to pelvic region, complications that occur during surgery and excessive sportive activities like bicycle riding.^{1,2} International Pudendal Neuropathy Foundation estimates that incidence of this condition is 1/100,000 but true incidence rates might be higher.³ Diagnosis of pudendal nerve neuropathy is based on clinical findings and 'Nantes' criteria (pain on pudendal nerve region, increased pain during sitting, absence of pain which interrupts sleep, no sensation loss on clinical examination and reduced pain after pudendal block) which was published in 2008.⁴ Treatment options for pudendal nerve neuropathy are medical treatment, pudendal nerve blockage, decompression surgery, and neuromodulation. The most effective treatment method has not been determined yet.⁵

In this article, we report a 47-year-old female patient who applied to the gynecology and obstetrics department due to pelvic pain on the left

side 10 years ago. The case had been evaluated as cervicitis and followed after local treatment. In the last year, left pelvic pain of the patient increased and left vaginal pain which is enhanced by exhaustion has started. Total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed. After the operation, pelvic pain disappeared but vaginal pain intensified and became persistent. The patient was describing intense pain during walking, carrying heavy load, and particularly sitting. Superior hypogastric plexus block was performed and analgesic treatment was given. But the treatment did not improve the symptoms; therefore, intravaginal local anesthesia with steroid injections was administered three times every 24 hours. Spinal cord stimulator was implanted as patient's complaints continued but it was removed because of immutability of symptoms. The case was assessed as pudendal nerve neuropathy in our clinic and 21 sessions of transcutaneous electrical nerve stimulation was applied to perineal region in acupuncture mode for 45 minutes twice a day. After the treatment, patient's complaints slightly decreased. One month after discharge, one vial of botox injection was performed to the painful area in the vagina; however, it did not improve her pain. The patient was operated for pudendal neuropathy in the urology clinic two months after discharge from our clinic. Postoperative pain levels showed no difference

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compared to preoperative levels. Pudendal nerve neuropathy must be considered in the diagnosis and differential diagnosis of pelvic pain and procedures should be conducted accordingly. In our case, invasive and non-invasive drug treatments were administered with no satisfactory improvement. To our knowledge, no case similar to ours which is resistant to all treatment options has been reported in the literature.

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