

Image-Guided Procedure Effective in Treating Pain Caused by Pudendal Neuralgia

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Pudendal neuralgia produces burning pain and hypersensitivity of the external genitalia and perineum. The condition is caused by inflammation of the pudendal nerves and is usually invisible on medical imaging. When conservative therapies fail, pudendal nerve block can be very effective in managing symptoms and improving quality of life.

“The condition has traditionally been very difficult to treat, and is very incapacitating,” explains J. Pablo Villablanca, MD, professor of radiology and head of the UCLA Radiology Pain Service. “Patients have such bad pain that they can’t sit comfortably — the area becomes so sensitive that many can’t even wear underwear.”

Both women and men can be affected by pudendal neuralgia, but the condition is much more common in women. It is sometimes associated with trauma to the pelvic floor — including trauma caused by childbirth or pelvic-floor surgery — but often occurs idiopathically.

Conservative approaches include mindfulness training to help patients focus away from their pain, pelvic-floor-muscle massage and medications to mediate nerve-associated pain. When these measures are not adequate, patients can be referred to an interventional radiologist for evaluation for a pudendal block. When appropriate, MRI imaging of the pelvis can be used to rule out structural anomalies, including tumors on or adjacent to the pudendal nerves. In addition, the pelvic nerve MRI may reveal physical abnormalities of the pudendal nerves that can help confirm the diagnosis.

If the pelvic MRI with nerve imaging shows that the nerve is abnormal, or if it shows no abnormality but the patient’s

symptoms match pudendal neuralgia, and they have failed conservative treatments, then they are candidates for an image-guided pudendal nerve block.

The pudendal nerve block is tailored to the individual patient’s symptoms. When symptoms present bilaterally, the block will be administered to both pudendal nerves. Patients with unilateral symptoms are treated only on the affected side. Similarly, the nerve block can be administered either before or after the pudendal nerve branches to the genital and perineal regions.

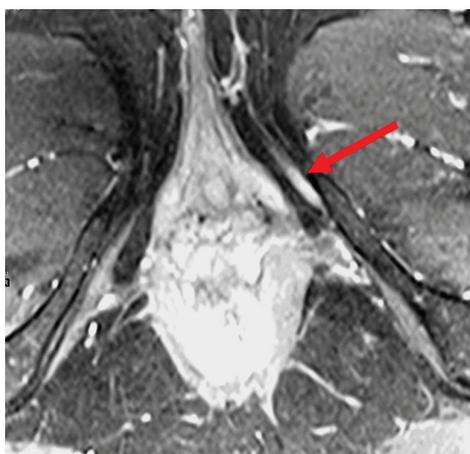
“The goal is to customize the treatment to the individual patient needs and to deliver these treatments to a location that maximizes the clinical improvement,” says Dr. Villablanca.

Under very low-dose CT guidance, a slender needle is passed through the buttocks muscles into the floor of the pelvis where the pudendal nerves are located. A long-acting anesthetic and a steroid are injected to treat pain and reduce inflammation. If necessary, the outpatient procedure can be repeated if pain symptoms return.

“The procedure is image-guided, and therefore very precise,” says Dr. Villablanca. “Because the CT used is extremely low dose, radiation exposure need not be a concern, even when there are repeated treatments.” CT guidance offers the interventional radiologist the ability to deliver the medications with great precision.

Dr. Villablanca reports positive early results using nerve blocks to treat pudendal neuralgia. “We are now in the process of analyzing our patient data, but it appears that more than half of patients get at least moderate pain reduction and improved functional capacity. A significant percentage of our patients show a marked improvement in symptoms, with a smaller percentage achieving complete resolution.”

Many patients suffering from pudendal neuralgia are not currently receiving adequate treatment because the condition is under-recognized and poorly understood. Dr. Villablanca refutes that view saying, “These people are suffering with a real condition and they deserve our attention and the best care we can provide.” 



The contrast enhanced MRI of the pelvis with nerve imaging shows swelling, enhancement (arrow) and bright T2W signal involving the left pudendal nerve at the level of Alcock’s canal, consistent with left pudendal neuritis.