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LETTER TO THE EDITOR

Low Back Pain and Leg Symptoms: Another Differential Diagnostic Possibility

This letter is in response to the recent article by Pinto et al[1]. The authors are to be congratulated on a very successful presentation of a case series. My comments are directed at some of the symptoms of patients 1 and 2, because they apply to other clients seen in a typical PT clinic. Patient 1 had chief complaints of low back and groin pain, whereas patient 2 reported left buttock pain and pins and needles down the left medial leg. The examination addressed many things, including testing for altered sensation to pinprick in the lower extremity dermatomes. However, I would like to suggest that for these and similar patients the inclusion of the lower abdominal wall in the sensory screen might be of value because of the possibility of a para-inguinal neuropathy.

A recent male patient had experienced painful traumatically induced neuropathies of 33 years duration involving the accessory obturator, ilioinguinal, and iliohypogastric nerves and the genital portion of the genitofemoral and vesicular portion of the hypogastric nerves. All these nerves are involved in the sensory innervation of the lower abdominal wall and genito-urinary region, but may also cause hypersensitivity in the groin and paraesthesiae and/or dysaesthesia in the medial calf (saphenous portion of femoral sensory nerve). Sensory alterations in the saphenous distribution of the medial leg are at times misinterpreted due to its overlap with the S1 dermatome. In this patient a reduced sensation to pin prick was not present but rather sensory hyperaesthesia and allodynia were noted in the lower abdominal and lower extremity dermatomes.

Of differential diagnostic importance is that the ilioinguinal and iliohypogastric nerves and the genital portion of the genitofemoral nerve can be palpated proximal to and/or within the inguinal canal. All three nerves take a primary origin from the T12-L2 nerve roots. The ilioinguinal nerve innervates the inguinal ligament, the anterior inner wall of the inguinal canal, and the spermatic cord and can be palpated within and outside the inguinal canal. The iliohypogastric nerve supplies the roof of the inguinal canal and innervates superficial skin. The genital portion of the genitofemoral nerve—despite its very small diameter—can be screened by applying pressure onto the floor of the inguinal canal, located at the top of the pubic bone just medial to the spermatic cord. There is however, considerable variation in the pathway of this nerve. These palpatory tests have

not been described in the literature. In the case of my recent patient, these intra-inguinal palpatory tests proved to be diagnostic: after failing previous conservative care including PT and interventional pain management, a triple neurectomy was successful in relieving long-standing complaints and in allowing a return to exercise.

Although these comments do not directly seem to apply to the case series in which all patient had a very successful outcome, I present this differential diagnostic possibility and the associated palpatory tests for the benefit of the small percentage of clients who present with similar findings but who do not make significant gains with PT.

Jerry Hesch, MHS, PT

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