Role of interventional pain management in patients with chronic pelvic pain

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ABSTRACT

Patients with chronic pelvic pain are often referred to a variety of specialists in gynecology, urology, and gastroenterology with the hope of finding a diagnosis and treatment. We describe a 51-year-old woman with long-standing chronic pelvic pain secondary to endometriosis who was successfully treated with superior hypogastric plexus blocks. Physicians should consider referring patients to interventional pain specialists for assistance with pain control after thorough diagnostic evaluation.

KEYWORDS Chronic pelvic; interventional pain management; pain; superior hypogastric plexus block pain

Chronic pelvic pain (CPP) is generally defined as noncyclic pelvic pain lasting >3 to 6 months. It is a fairly common problem, affecting 6% to 26% of reproductive-age women.^{1,2} The most common problems leading to CPP are irritable bowel syndrome, adhesions, musculoskeletal causes, uterine disorders such as fibroids, and endometriosis. Patients with CPP may have multiple causes of pain, because endometriosis and interstitial cystitis commonly occur together.³ There is also a risk that continued pain will lead to central sensitization and the development of chronic pain.⁴ We present a case of a 51-year-old woman with long-standing CPP secondary to endometriosis who was successfully treated with superior hypogastric plexus blocks.

CASE DESCRIPTION

A 51-year-old woman had CPP in her lower abdomen and pelvic region, which she described as severe and cramping. She was managed by her primary care physician for the disorder for several years with conservative management including oral contraceptives and pain medications such as nonsteroidal anti-inflammatory drugs. She was referred to several specialists including gastroenterology, urology, and gynecology for further assistance with her condition. The

patient underwent several invasive diagnostic tests and surgeries including laparoscopy, biopsies, and lysis of adhesions. She was diagnosed with endometriosis based on diagnostic laparoscopy and biopsies suggestive of the disease. These surgeries established the diagnosis but were unsuccessful in treating her CPP. She was started on stronger pain medications, including neuropathic agents and opioids. She was taking >90 morphine milligram equivalents, which is not recommended for the treatment of nonmalignant pain.⁵ After several years of struggling with this condition, the patient was referred to interventional pain management.

A diagnostic and therapeutic bilateral superior hypogastric plexus block was performed under image guidance with the use of 8 mg of dexamethasone and 18 mL of 0.25% bupivacaine, divided equally for each side (*Figure 1*). The patient reported significant improvement shortly after the procedure was performed that lasted 4 months. She continues to receive repeat injections, with each injection providing 70% to 80% pain relief lasting approximately 4 months. She reported significant improvement in her pain scores and quality of life and was able to wean her opioid dose down to 15 morphine milligram equivalents with the addition of these pain procedures.

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Figure 1. Anteroposterior and lateral views demonstrating needle placement and contrast dye spread when performing a superior hypogastric plexus block under fluoroscopy.

DISCUSSION

CPP is often a difficult diagnostic and therapeutic dilemma, resulting in prolonged patient suffering. Physicians should be aware of additional treatment options for CPP before resorting to high-dose opioid therapy. Earlier referral to interventional pain physicians and consideration of superior hypogastric plexus blockade could provide effective treatment of sympathetically mediated CPP for some patients in this complex patient population.^{6,7}

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