INSTITUTE TO ENHANCE PALLIATIVE CARE

PALLIATIVE CARE CASE OF THE MONTH

Post Inguinal Herniorrhaphy Groin Pain

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Case: DS is a 30 y/o M with HIV and history of inguinal hernia status post repair two years prior who presented for evaluation of pain. He stated that shortly following his hernia repair he developed "stabbing" pain in his right inguinal area radiating to his right testicle rating 10/10 in intensity exacerbated by standing, squatting, or running and partially relieved with Excedrin. He was evaluated 6 months before by pain specialists who had performed multiple illioinguinal nerve blocks to the right inguinal region that provided temporary relief for several weeks before the pain returned. He had escalated his use of Excedrin and recently developed a bleeding peptic ulcer. On physical exam his pain was roughly 3 cm medial and inferior to the anterior superior iliac spine consistent with ilioinguinal distribution. He had initially been placed on gabapentin which had been discontinued because of muscle spasms. He was recently diagnosed with Crohn's disease and felt extremely overwhelmed and depressed. We started him on amitriptyline and referred him for neurosurgical evaluation. Prior to neurosurgical evaluation his pain continued to increase and he was placed on escitalopram and prn vicodin with minimal improvement in his symptoms.

Discussion: Inguinal hernia repair is a common surgical procedure with approximately 2800 surgeries per million people in the United States alone. Post-surgical pain following inguinal hernia repair is common with one review reporting a range of incidence between 15-53% in several large trials (1). While multiple etiologies have been implicated, the most common may be damage to the pubic tubercle during the stapling of the mesh prosthesis. Neuropathic pain may result from partial or complete division, stretching, contusion, crushing, electrical damage, or suture compression of either the ilioinguinal or genitofemoral nerves. This pain is often described as pulling, tugging, tearing, throbbing, stabbing, shooting, numbing, and dull. It may be aggravated by ambulation, stooping, or hyperextension of hip and sexual intercourse and relieved by recumbent position and flexion of the hip and thigh (1).

Post herniorrhaphy pain can have a major impact on quality of life. One Danish investigation surveying 1166 patients one year after either inguinal or femoral hernia repair found that 29% of patients reported having pain in the area of the hernia within the past month and that 11% reported that the pain impaired their work or leisure activities (2). In order to avoid chronic pain, surgeons have examined prophylactic ilioinguinal neurectomies. One randomized trial of 100 unilateral inguinal hernia repair patients demonstrated a reduction in pain at 6 months from 29% in the control group to 8% in the prophylactic neurectomy group. This was accomplished without additional morbidities in neurosensory disturbances, groin numbness or quality of life (3).

A paucity of controlled trials exists regarding optimal pharmacotherapy for chronic post herniorrhaphy pain. Gabapentin is one of the best studied treatments and has demonstrated efficacy in relieving post herniorrhaphy pain in small studies (4). Other recommended therapies include acetaminophen, nonsteroidal anti-inflammatory medications, opioids, antidepressants, anticonvulsants, antiarrhythmic medications, N-methyl-D-aspartate receptor antagonists, physiotherapy, acupuncture, transcutaneous electrical nerve stimulation, and cognitive pain management (5). In addition to neurectomy, surgical procedures such as spinal cord and peripheral nerve field stimulation have also demonstrated promising results for pain control of post inguinal herniorrhaphy groin pain (6).

Resolution of the case: The patient was evaluated by neurosurgery and shortly afterwards underwent surgical intervention for placement of a peripheral nerve stimulator. He was discharged from the hospital after a 5 day stay on prn vicodin and was seen in pain clinic two weeks later. He stated at that time that his pain had completely resolved and that he had not used any prn medications including over-the-counter medications in over the past week. He felt that his mood and functional status had improved to baseline and that he was excited to have been given a "second chance."

References:

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