

CASE REPORT

Management of a Case of Inguinodynia Following Hernia Repair

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ABSTRACT

Chronic groin pain (inguinodynia) following hernia repair is a significant, though less reported, problem. The reason for it is due to damage to inguinal nerves, symptoms of which vary from dull ache to sharp shooting pain along the distribution of inguinal nerves. Our case report is about a 62-year-old male presenting with pain along the line of incision in the inguinal crease bilaterally managed by ilioinguinal and iliohypogastric nerve blocks under ultrasonography (USG) guidance with triamcinolone, 0.5% lignocaine, and normal saline. Post procedure, the patient had significant pain relief.

Keywords: Ilioinguinal nerve and iliohypogastric nerve blocks, Inguinodynia, Ultrasonography.

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INTRODUCTION

Chronic groin pain (inguinodynia) is a complication that occurs following inguinal hernia mesh repair, having significant impact on quality of life.¹ The reason hypothesized for inguinodynia are perioperative nerve damage, postoperative fibrosis, or mesh-related fibrosis. The nerves involved include ilioinguinal nerve, iliohypogastric nerve, and genital branch of genitofemoral nerve. These nerves are damaged by trauma during dissection or retraction of tissues or nerve entrapment due to postoperative fibrosis or mesh-related fibrosis.²

It has been suggested that injury is due to inadequate dissection, failure to visualize and protect nerves, and failure to determine aberrant location and anatomical variations in the nerves.^{2,3}

CASE DESCRIPTION

A 62-year-old male, watchman by occupation, presented to us with pain following bilateral inguinal hernia repair 1 month ago. The numerical rating scale (NRS) was 10. Patient complained of dragging and pulling type of pain bilaterally along the site of incision at the level of inguinal crease. Pain was present all through the day, aggravated by movement, coughing, and straining, which was relieved only slightly with medication. Patient complained of nocturnal pain. Pain detect tool score was 14, indicating neuropathic type of pain, and patient health questionnaire (PHQ9) score was 10 indicating moderate depression. Patient was a known hypertensive on tablet metoprolol 50 mg once daily for the past 3 years. On examination, there was nothing obvious on inspection, tenderness along suture line, so much so that the patient was not allowing to touch (hyperalgesia).

MANAGEMENT

Patient was diagnosed to have inguinodynia and planned for bilateral ilioinguinal nerve and iliohypogastric nerve blocks (field block) under ultrasonography (USG) guidance. After the standard NPO protocol and basic investigations, the patient was shifted to the operation theater. Monitors were attached, baseline vitals

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evaluated, and intravenous fluid started. Under USG guidance, 40 mg triamcinolone + 0.5% preservative free lignocaine + normal saline (total volume 10 mL) were injected in the sheath between internal oblique and transversus abdominis after confirming sonological landmarks as shown in Figure 1 below.

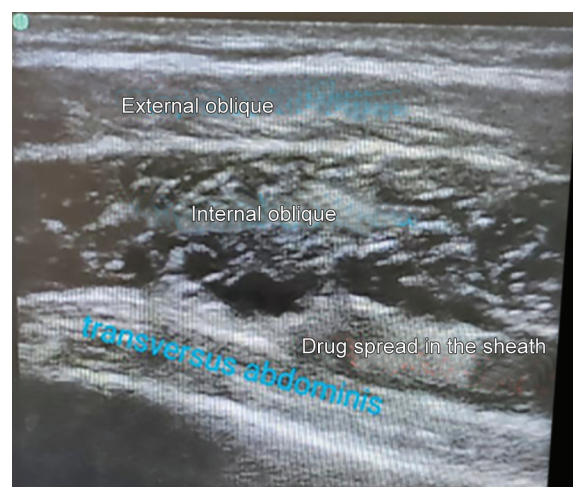


Fig. 1: Drug spread between two muscle layers for the block

Post procedure, the patient was monitored for 2 hours. Patient had an NRS of 2 after 24 hours and was discharged from the hospital with a happy and thankful face.

DISCUSSION

Inguinodynia is potentially disabling with neuralgia, paresthesia, hypoesthesia, or hyperesthesia. It causes limitation of physical activity, sleep disturbances, and psychological stress. Predictors of moderate to severe pain include recurrent hernia, bilateral hernia repair, vigorous retraction and dissection of tissues, and high pain score 1 week postoperative.⁴ The other causes hypothesized include nerve entrapment, compromise of spermatic cord, osteitis pubis, idiosyncratic response to mesh implantation, inflammatory, or irritable bowel disorder.

Ilioinguinal and iliohypogastric nerve blocks are routinely used as anesthetic technique for surgeries at inguinal region such as inguinal hernia and encysted hydrocele and for postoperative analgesia of lower abdominal surgeries.⁵

The USG-guided nerve block helps by visually identifying the nerves to be blocked, which helps in accurate placement of drug.⁶ This technique needs expert skills and accurate visualization of nerves.

CONCLUSION

In summary, our case had inguinodynia following 1 month history of bilateral inguinal hernia repair managed by USG-guided

ilioinguinal nerve and iliohypogastric nerve blocks with excellent postprocedure outcome. With skillful use of USG, we were able to give the block precisely with no complications.

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