

Celiac Plexus Block in Lateral Recumbent Position: A Case Report

Michael Rotko, MD, MS¹, Daniel Trif, MD², Steven Le, MD¹, Christian Wirawan, DO¹, Tarik Malik, MD², Sravani Mannuru, MD³

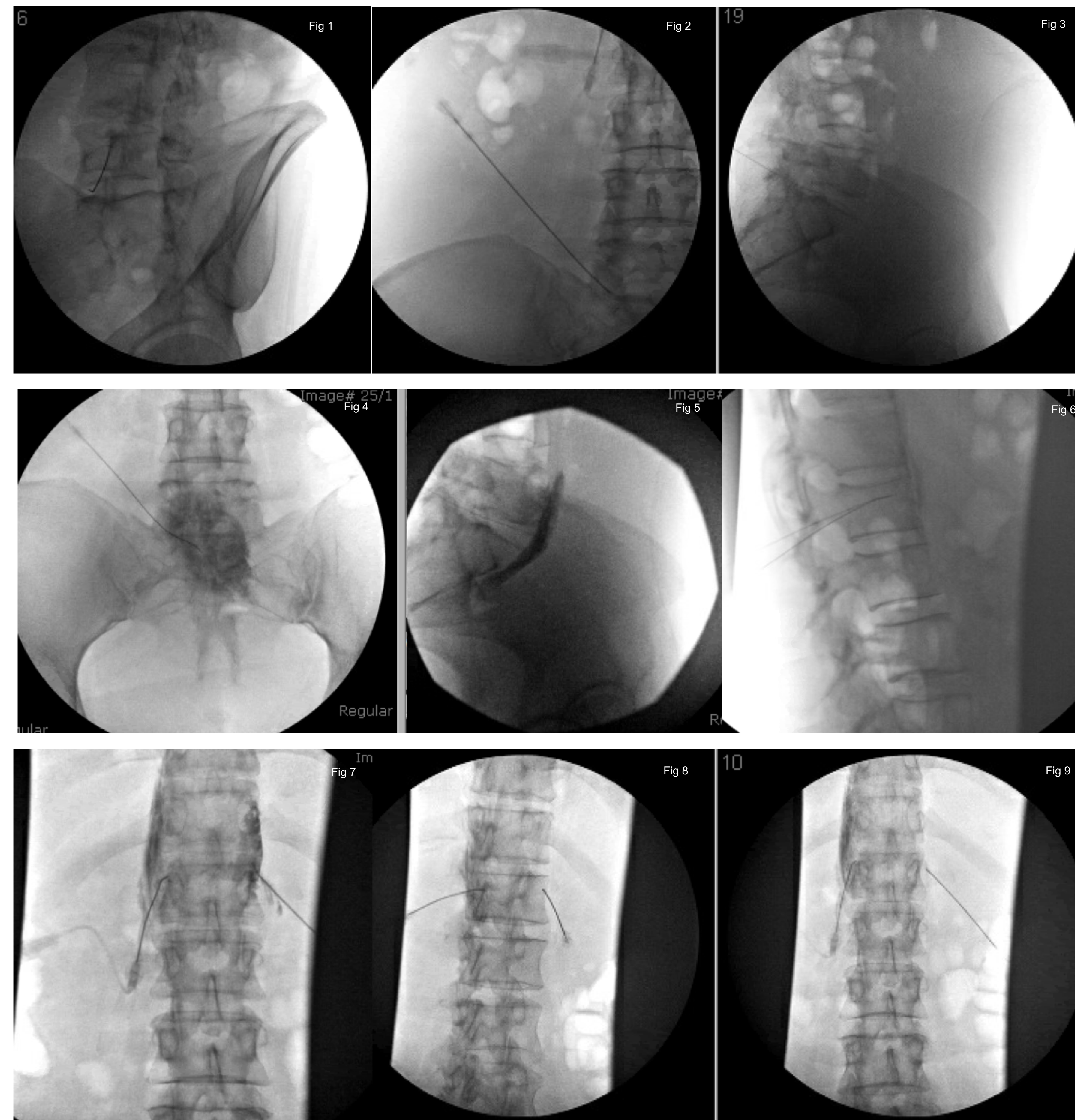
1 Schwab Rehabilitation, Chicago, IL; 2 Department of Anesthesia and Critical Care, University of Chicago, Chicago, IL; 3 Department of Radiology, University of Iowa Hospitals and Clinics, Iowa City, IA

Introduction

- Abdominal pain in the setting of end-stage pancreatic cancer can be debilitating. Superimposed by pelvic pain from metastatic ovarian cancer significantly decreases quality of life as pain becomes difficult to control. The patient is positioned on the procedural table in order to provide the safest route of access. Potential positions include prone, supine, lateral decubitus, and oblique. Moreover, several techniques have been described including the posterior para-aortic, anterior paraaortic, posterior transaortic, and transintervertebral disc approaches. Choice of technique should be determined by operator preference, patient anatomy, and comorbidities (e.g. inability to tolerate prone positioning). Commonly transdiscal approaches consist of posterior approach, patient positioned prone, needle passed through the intervertebral disc to place the tip in the proximity of aorta. This is a case where we describe a successful attempt of the patient being in lateral recumbent position.

Case

- Here we report a case of a 55-year-old female with inoperable metastatic pancreatic adenocarcinoma with metastasis to the ovaries who underwent a combination of Bilateral Superior Hypogastric Neurolysis and Celiac Plexus Neurolysis.
- This patient was hesitant to undergo an intrathecal trial and implant and instead preferred direct sympathetic blocks and neurolysis due to her advanced disease and prognosis. The patient required sedation and a deep plane of monitored anesthesia care (MAC) in an operating room with a supervising anesthesiologist to tolerate prone positioning.
- A trans-intervertebral disc approach was used to gain access to the celiac plexus alcohol block, but the patient was placed in a lateral recumbent position due to intractable pain and inability to tolerate prone positioning.
- Multiple attempts were made to make patient comfortable with pillow under abdomen, but failed to make patient immobile for safe procedure.
- After undergoing neurolysis of the celiac plexus and the superior hypogastric plexus, the patient had near complete resolution of pain while sitting and approximately 30% relief with physical activity. The patient was successfully discharged home, and did not require any inpatient admissions for pain for the remainder of her life. She was placed on hospice and passed away ten weeks after the neurolytic procedures.



Figures 1-5: Superior hypogastric neurolysis via a unilateral approach using the fifth lumbar vertebrae as a landmark. A total of 5 mL of 99% dehydrated alcohol was administered. Contrast showed bilateral spread so the procedure was not repeated on the right side.

Figures 6-9: Celiac plexus neurolysis via a bilateral approach was performed using the first lumbar vertebrae as a landmark. A total of 7 mL of 99% dehydrated alcohol on the left and 13 mL of 99% dehydrated alcohol on the right was administered.

Discussion

- Celiac Plexus Block alone can be a viable treatment option for pancreatic cancer pain; however, results may at times be inconsistent (1).
- Therefore, a combined approach with superior hypogastric neurolysis can provide better pain relief as it encompasses most of the innervations in the abdomen (2).
- Moreover, in our approach, the needle insertion point is closer to the midline compared to conventional methods, minimizing the risk for organ puncture, as the tips of the needles can be placed adjacent to the anterolateral or lateral wall of the aorta bilaterally (4).
- The first description of CPB also known as the ‘Classic technique of Kappis,’ required the patient to lie in the lateral decubitus position with the needle introduced just below the 12th rib, 7 cm lateral to the midline (12).
- Not a lot of published studies have mentioned using this technique, as modern day techniques focus on anterior approaches in supine positioning or posterior approaches where the patient is prone (13).
- This case report gives the alternative lateral decubitus positioning and images which show its technical course.
- Moreover, it shows that in patients with short life expectancy - where palliation is highest priority - option to bypass diagnostic sympathetic block and go straight to neurolysis.
- She was able to go home and was pain free for last 10 weeks of life.

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