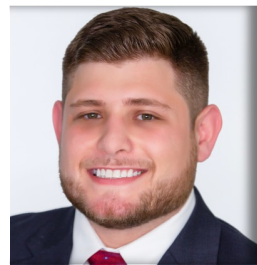


MANAGEMENT OF CHRONIC POST-SURGICAL ABDOMINAL PAIN USING CELIAC PLEXUS BLOCK WITH BOTULINUM TOXIN A

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BACKGROUND
Chronic focal abdominal pain presents a challenge in pain management and is often resistant to conventional approaches. Botulinum Toxin A (BoNT-A) functions by binding to presynaptic nerve endings, blocking the release of acetylcholine. It has shown effectiveness in treating dystonia and can induce sympathetic blocking by targeting cholinergic presynaptic fibers at sympathetic ganglia.

- REPORT & RESULTS**
- 61-year-old female with severe and localized right upper quadrant (RUQ) abdominal pain following cholecystectomy for several years.
 - Multiple specialists were seen across states. Extensive GI workup, including exploratory laparotomy, MRI/MRCP, and CT scans, excluded anatomical and/or infectious etiology.
 - Treatment regimen included opioids, muscle relaxants, anti-inflammatories and medical marijuana.
 - Opioid requirement was 15 MME/day. Patient was very active and an avid traveler, limited by pain and frustrated by being dependent on medications.
 - A Celiac Plexus block with local anesthetic first provided >95% pain improvement for 24 hours.
 - The block was then repeated with 20 units of BoNT-A injected along with 1cc of 0.5% bupivacaine. A retrocrural approach was utilized, with entry at the level of the right L1 vertebral body
 - The patient experienced a sustained reduction in pain levels, exceeding 80%, which endured over several months.
 - During this period, she was weaned from her opioid pain medications.
 - She experienced an increase in activity and functionality and improved sleep uninterrupted by pain
 - Block has been repeated for this patient as needed, dosages increased to 25u, with effects lasting an average of 4-6 months.

DISCUSSION
We highlight the efficacy of a celiac plexus block with BoNT-A as a promising intervention for chronic focal abdominal pain. This technique's success suggests a possible link between nerve-mediated pain pathways and the targeted neuromodulatory effects of BoNT-A. Future research should delve into the underlying mechanisms, refine procedural protocols, and explore its broader application in chronic pain management.

Celiac Plexus Block with *Botulinum Toxin A* provided substantial relief for chronic focal abdominal pain, improved pain control, and alleviated the need for opioids.

	Before Intervention	After Intervention
Activity Level (steps)	5,000	15,000-20,000
Pain Medications Used	Hydrocodone 5mg TID PRN Celecoxib 200mg BID PRN Tizanidine 4mg BID PRN CBD gummies Medical Marijuana PRN for sleep	Celecoxib 200mg BID PRN Medical Marijuana PRN for sleep
Pain Relief Duration	1-2 Hours	4-6 months



Fig 1. AP VIEW

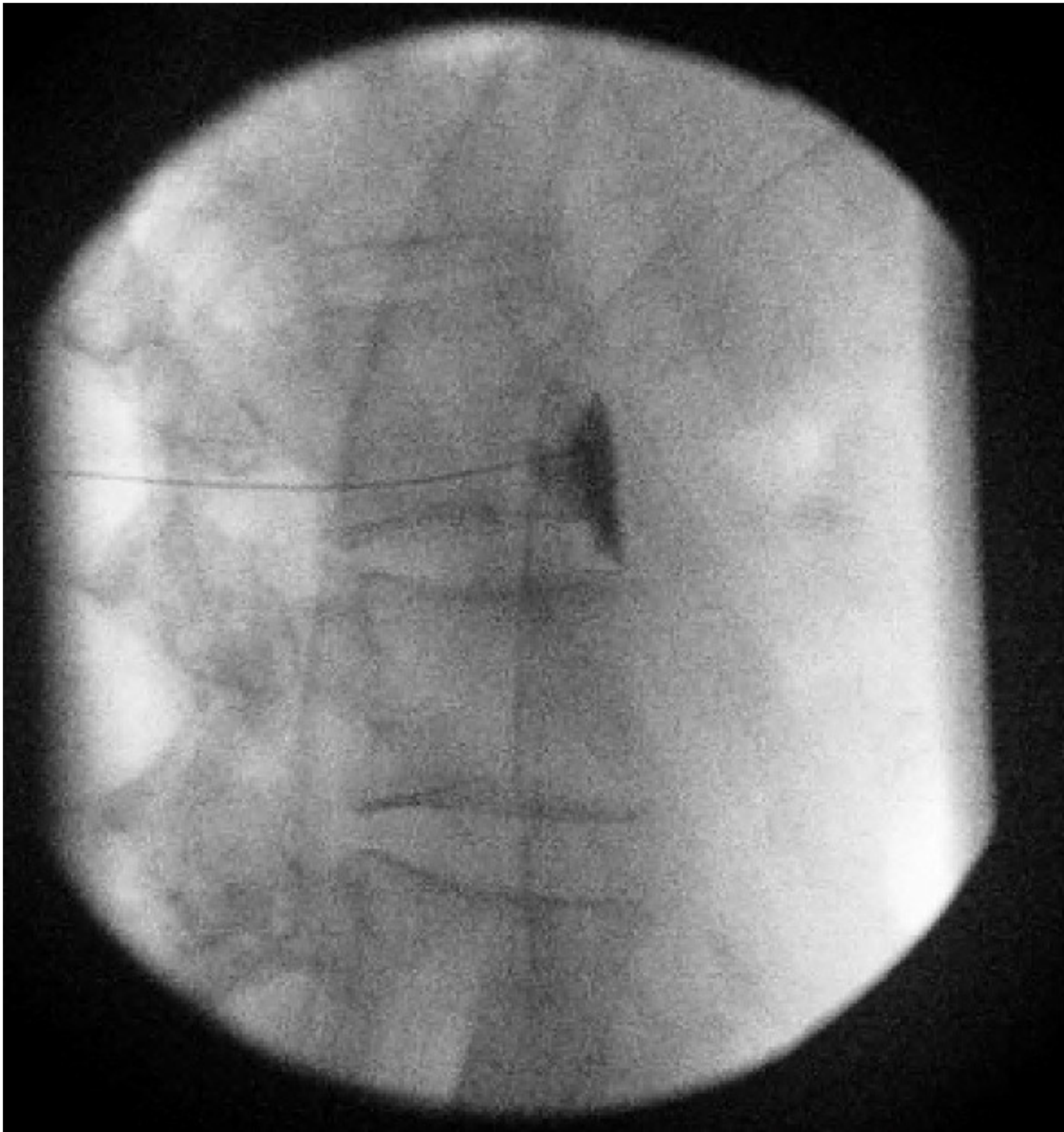
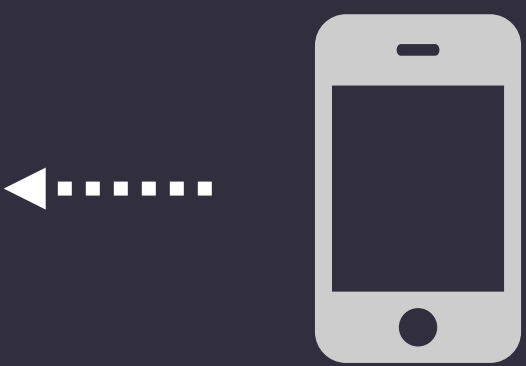


Fig 2. LATERAL VIEW

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