

Ganglion of Impar Block for Prostate Cancer Pain: A Case Report

Abby Ventura MD, MBA¹, Michael Harbus, DO¹

1. Department of Physical Medicine & Rehabilitation at Mount Sinai Hospital



INTRODUCTION

- Pelvic and perineal pain in prostate cancer can be difficult to manage, especially when resistant to multiple medications and/or opioid therapy.
- The Ganglion of Impar (GOI):
 - Cluster of sympathetic nerves located at tip of sacrum near sacrococcygeal junction (Figure 1)
 - Carries visceral afferent pain signals from perineum, rectum, & genitals to brain.
- Blocking this ganglion can offer a targeted relief option for patients with cancer-related pelvic pain.¹

METHODS

Patient informed consent was obtained for submission of a case report. All patient protected health information has been de-identified. As the case report is devoid of patient identifiable information, it is exempt from IRB review requirements as per Mount Sinai Hospital policy.

CASE REPORT

- 56 y/o M with hx of chronic abd pain from Chron’s Disease & multiple abdominopelvic surgeries, presented to an outside facility with **8 months** of pelvic pain (mid-scrotum to rectum).
 - Evaluated by multiple specialties → dx = prostate cancer → underwent prostatectomy
 - **Despite surgical intervention, his pain persisted for months.**
 - Pain was “electric-shock like” with spasms and nausea.
 - Despite **multiple medications and escalating doses of opioids**, his pain continued to be poorly controlled.
- He presented to our interventional pain clinic with persistent symptoms **impeding his appetite and sleep.**
 - **Presenting Pain Level = 10/10**
 - Underwent a fluoroscopy-guided GOI block via **trans-sacroccygeal approach.**
 - No blood or paresthesia were noted at the advancement of the needle. Injection of contrast demonstrated proper placement. A total of 6mg Betamethasone with 5mL of 0.5% Bupivacaine was injected. Patient tolerated procedure well without complications or side effects.
 - **2-weeks follow-up, Pain Level= 4/10**
 - **2-months follow-up, Pain Level= 5/10**, pain was only now starting to return but continued to provide improved QOL.

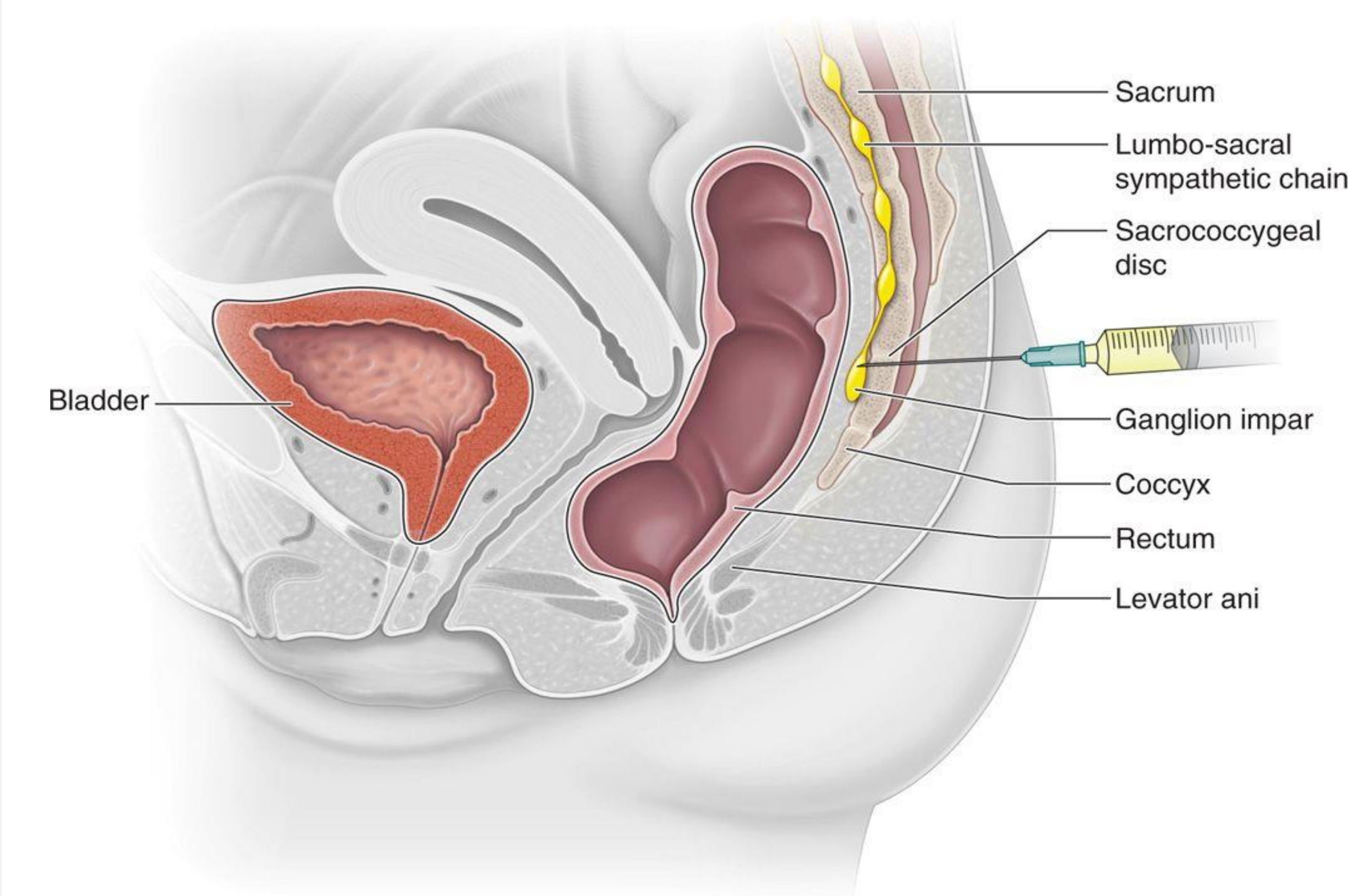


Figure 1. Anatomical Location of Ganglion of Impar & Injection Site for Block²

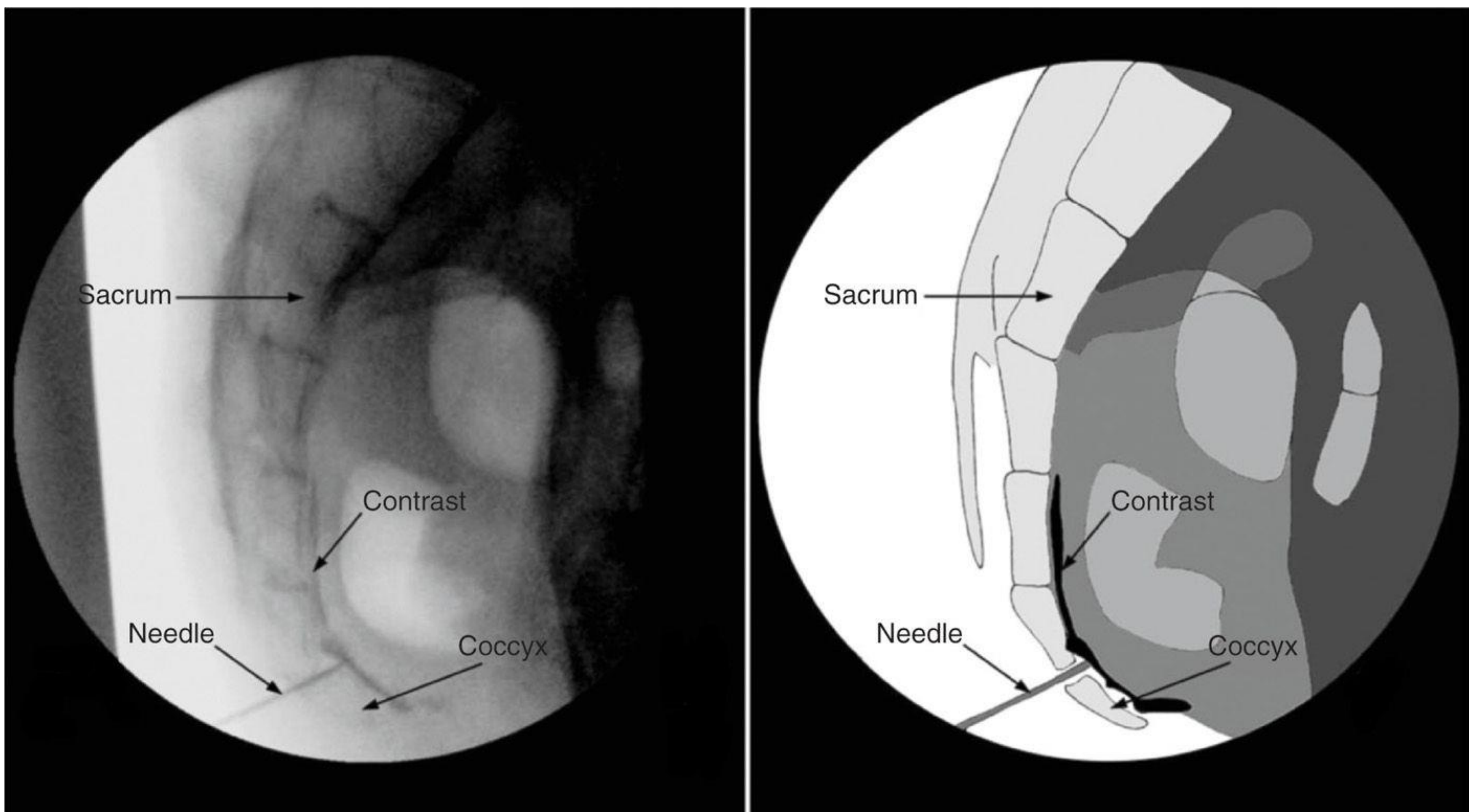


Figure 2. Fluoroscopy-guided Ganglion of Impar Block via Trans-Sacroccygeal Approach²

DISCUSSION

- GOI blocks can provide meaningful relief in patients with pelvic malignancy.³
- For pain **unresponsive to systemic therapy**, it offers a safe, focused, and **minimally invasive alternative**.¹
- This case, more specifically suggests that GOI blocks **should be considered** in patients with **prostate cancer** who experience **persistent pelvic/perineal pain despite conventional treatment**.
- **Some Benefits:**
 - Reduce reliance on opioids
 - Help restore function
 - Increase comfort
 - Improve QOL in challenging cases.

REFERENCES

1. A.; O. J. G. (n.d.). *Ganglion impar block in chronic cancer-related pain - a review of the current literature*. Revista espanola de anestesiologia y reanimacion. <https://pubmed.ncbi.nlm.nih.gov/38670492/>

2. Themes, U. (2017a, February 12). *Ganglion impar block*. Anesthesia Key. <https://aneskey.com/ganglion-impar-block/>

3. Kim, C.-S., Jang, K., Leem, J.-G., Shin, J.-W., Kim, D.-H., & Choi, S.-S. (2021, June 11). *Factors associated with successful responses to ganglion impar block: A retrospective study*. International journal of medical sciences. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8241784/>