

A wooden ladder is positioned on the right side of the frame, leaning against a dark green background of foliage. The ladder is made of weathered wood and has several rungs. The lighting is dramatic, with the ladder's rungs and the background foliage appearing to glow from behind, creating a silhouette effect. The overall mood is contemplative and focused on the theme of climbing or reaching a goal.

# Climbing the Ladder

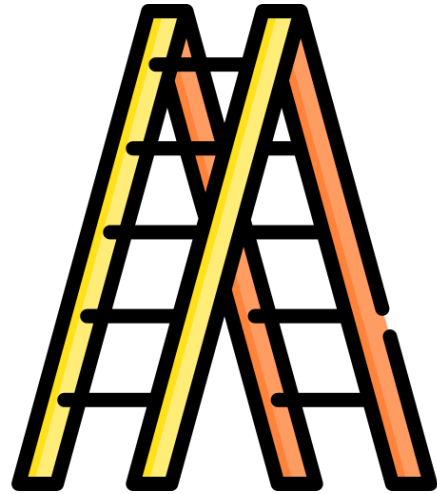
**Interventional Treatments for Cancer Pain**

Trainee: James Cho, MD | Mentor: David Hao, MD  
Department of Anesthesia, Critical Care and Pain Medicine  
Massachusetts General Hospital



# Objectives

1



Review the World Health Organization (WHO)'s analgesic ladder and the role of interventional therapies in the treatment of cancer pain

2



Discuss a case of a patient with metastatic rectal cancer presenting with uncontrolled pain

3

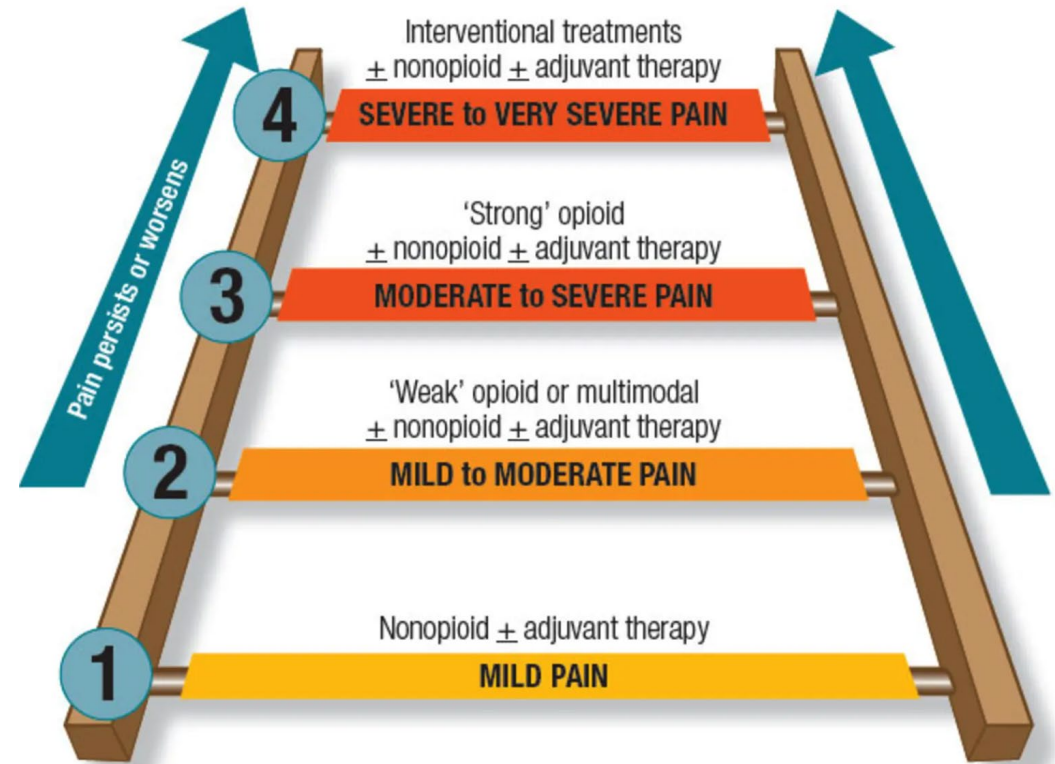


Explore interventional treatment options available for cancer pain



# Cancer Pain and the Role of Interventional Therapies

- Cancer pain can result from direct, structural effects of tumors; from paraneoplastic syndromes; or from anticancer therapy.
- Determining the source(s) of cancer pain is essential to selecting the proper therapy.
- The WHO analgesic ladder was developed to guide treatment of cancer pain.
- A fourth step encompassing interventional treatments has been suggested.



Pergolizzi J, Raffa R. The WHO Pain Ladder: Do We Need Another Step?. *Pract Pain Manag.* 2014;14(1).



# Case Presentation

## Patient Summary

58-year-old woman with metastatic rectal cancer presents with local recurrence after surgery and chemotherapy

## Hospital Problems

- Admitted for hydronephrosis and severe pelvic pain
- MRI shows mass infiltrating pelvic organs, presacral venous plexus, and the sacral plexus
- Although pain control improved with escalation of analgesic regimen, patient now experiencing concerning level of sedation, leading to a pain consult

## Inpatient Pain Regimen

Methadone **15 mg** PO TID (**up from 5 mg**)

Hydromorphone 8-12 mg PO Q4H PRN

**Hydromorphone 1.5 mg - 2 mg IV Q3H PRN (new)**

Acetaminophen + NSAIDs ATC

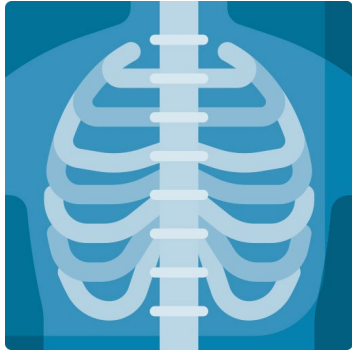
Duloxetine 60 mg PO QD

## Assessment

Neuropathic pain (sacral plexus involvement), somatic pain (soft tissue involvement), as well as visceral pain (pelvic organs).

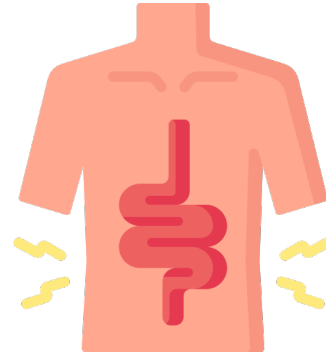


# Interventional Therapies for Cancer Pain



## Somatic Pain

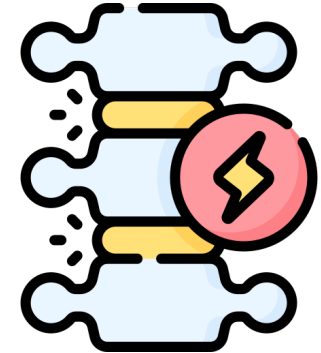
- Truncal blocks (e.g. paravertebral)
- Kyphoplasty/vertebroplasty for pathologic fractures
- Intrathecal drug delivery
- Steroid injections



## Visceral Pain

Often treated with sympathetic blocks, such as:

- Stellate ganglion blocks
- Lumbar sympathetic blocks
- Celiac plexus blocks
- Superior hypogastric plexus blocks
- Ganglion impar blocks

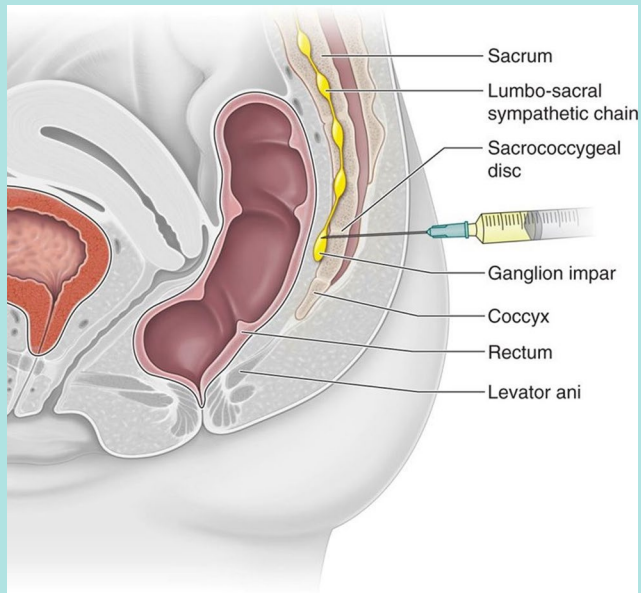


## Neuropathic Pain

- Steroid injections
- Spinal cord / peripheral nerve stimulators

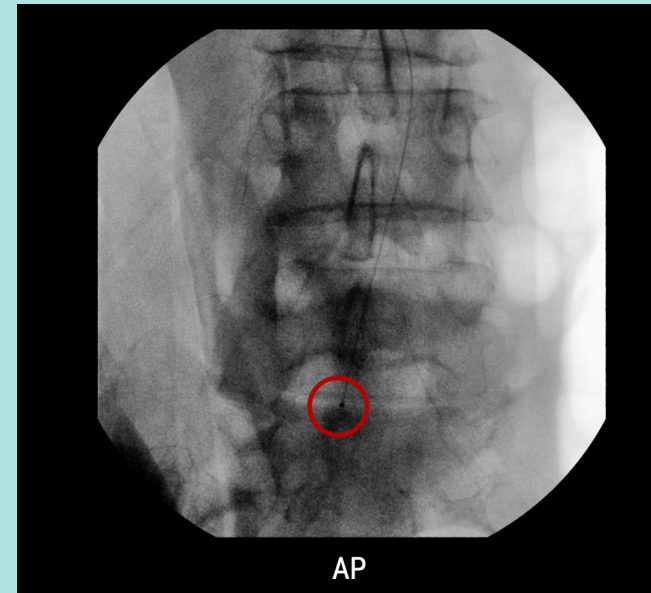
# Case Presentation (Continued)

## Ganglion Impar Sympathetic block



No response to prognostic ganglion impar sympathetic block

## Intrathecal Pump



- POD#1, patient's pain significantly improved.
- By POD#6 (three days after discharge), weaned off of methadone and systemic regimen de-escalated to **Hydromorphone 2 mg Q6H PRN** and **Duloxetine 60 mg PO QD**.





# Conclusion

- The pain physician has a large armamentarium to choose from when treating cancer pain.
- A thoughtful consideration of the etiology of each patient's pain may improve success.
- In some scenarios, climbing the ladder to an interventional procedure may lead to a de-escalation of treatment while improving patient comfort.

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