



Intrathecal and superior hypogastric neurolytic block for intractable pediatric cancer pain



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Introduction

While pediatric cancer can generally be treated successfully with systemic analgesics, **there is a role for regional techniques** in a subset of patients **with refractory pain or unmanageable side effects**.

We describe **a novel case in which two neurolytic approaches** were used to treat intractable perineal and pelvic pain in a pediatric oncology patient with a non-resectable metastatic embryonal rhabdomyosarcoma

Methods

1. Intrathecal catheter

- Fluoroscopic guidance at the L4-5 interspace and **advanced caudally to S2** (Figure 1A) → Ropivacaine-hydromorphone infusion was initiated in recovery room
- Over 4 days, hyperbaric phenol 5.1% in dextrose 7% were injected via the catheter for sacral root neurolysis with the patient sitting upright, total volume of 4.5ml.

2. Superior hypogastric plexus block

- Dyna-CT for needle guidance, **anterior to the L5-S1 disc** → 15ml of phenol 6% (Figure 1B)

Results

- Initial short-term improvement in pain control and alertness** followed by a dramatic increase in opioid consumption (2 weeks later)
- Imaging showed progression of tumor growth in the pelvis and worsening of a large chronically infected mass extending through the perineum.
- **Repeated neurolytic blocks lead to improvement in pain and opioid consumption**

Mean Opioid Consumption (morphine equivalents)

- Pre-procedure 1: 362.4 mg
- Pre-procedure 2: 449.5 mg
- Post-procedure 1: 275.2 mg
- Post-procedure 2: 223.7 mg

Conclusion

- In selected cases of localized **intractable cancer pain**, there is a **role for neurolysis**.



Figure 1. A) Sagittal CT. Intrathecal Catheter placed under fluoroscopic guidance at L4-5 Interspace and advanced caudally to S2 B) Axial CT. Neurolytic superior hypogastric plexus block, placed anterior to L5-S1

