

REFRACTORY CANCER PAIN IN A PEDIATRIC PATIENT WITH ADVANCED MALIGNANT PERIPHERAL NERVE SHEATH TUMOR:
A TOTAL PAIN-ORIENTED PALLIATIVE CARE APPROACH

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OBJECTIVE

To describe the multidisciplinary management of refractory cancer pain in a pediatric patient with advanced malignant peripheral nerve sheath tumor (MPNST) using a total pain-oriented palliative care approach, and to highlight the importance of addressing physical, psychological, and social dimensions of suffering.

CASE HISTORY

An eight-year-old Afghan girl with known MPNST, origin in the left axillary and retro pectoral area was referred with progressive metastatic disease after oncologic therapy. Imaging classified the skeletal metastases as extensive, with a pathological fracture of the T11 spine vertebra and spinal cord compression, along with the involvement of the pelvic and sacrococcygeal area (Figure 1, 2). Prior palliative radiotherapy provided temporary pain relief. She was admitted due to severe pain crisis, characterized by mixed nociceptive and neuropathic pain. The Numerical Pain Scale and Wong-Baker FACES Pain Rating Scale were used for pain assessment. She had significant psychological element including anxiety, agitation, and sleep disturbance. Early management included an escalation of oral and subcutaneous morphine with combined adjuvant agents, which included gabapentin, amitriptyline, carbamazepine, non-steroidal anti-inflammatory drugs, and topical ketoprofen. Pharmacologic therapy remained insufficient to control pain. Several sessions with the patient, revealed that she was stressed about her long separation from her mother and sisters and that she had not seen them in the last year after beginning her cancer treatment. Family was contacted in Afghanistan to support her along with introducing antidepressant therapy. Focal limb peripheral nerve blocks were done and resulted in short-term effects. Given the refractory pain, a tunnelled epidural catheter was inserted at the L3-L4 level, which administered a continuous local anaesthetic, bupivacaine, along with subcutaneous morphine and midazolam infusion (Figure 3). This intervention led to significant improvement in comfort, pain behaviour reduction, and increased tolerance to routine care (Table 1).

FIGURE 1: MRI OF THORACIC SPINE

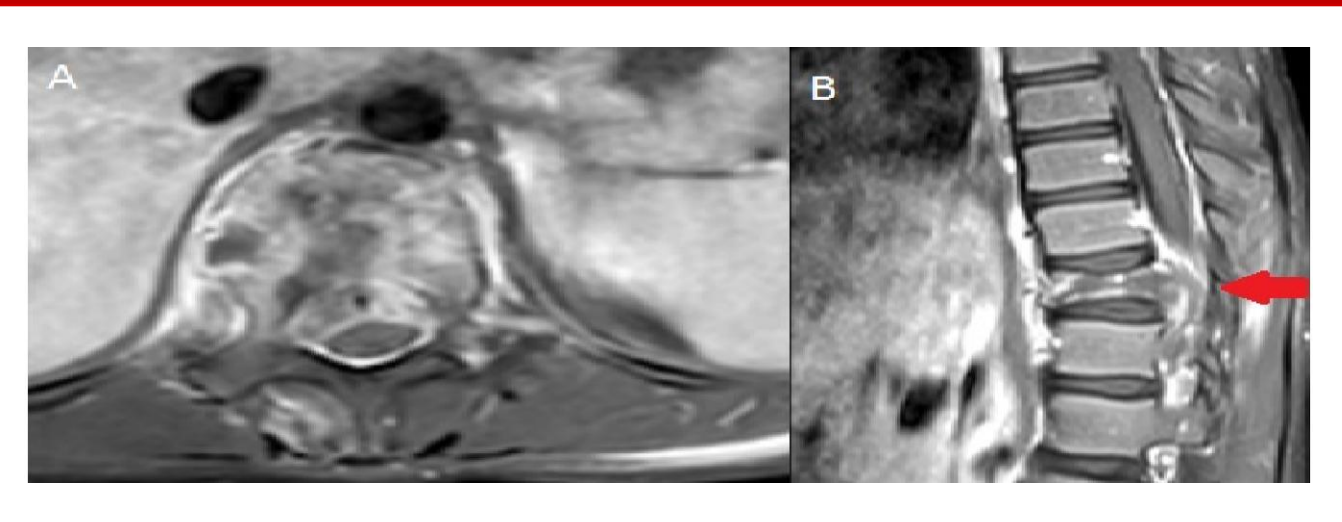


FIGURE 2: MRI OF LUMBAR SPINE

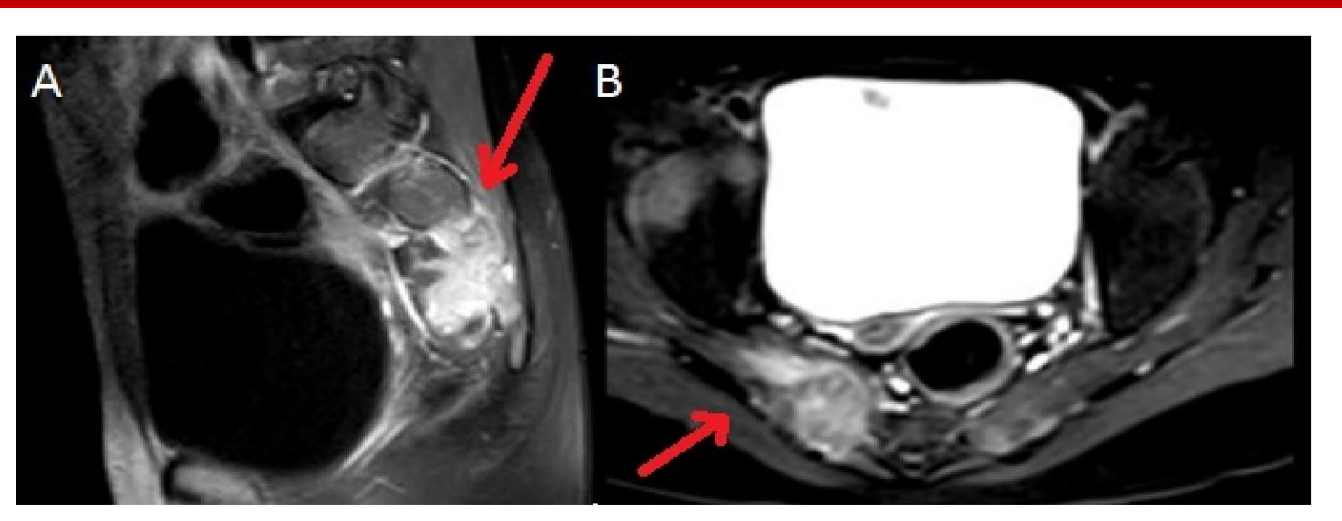


FIGURE 3: INFUSION PUMP



TABLE 1: PAIN SCORES BEFORE AND AFTER INTERVENTIONS	
Interventions	Pain Score
No analgesia	10
Oral analgesia (non-opioids)	10
Oral analgesia (opioids + adjuncts)	9
Postoperative day after tunnelled epidural catheter	
1	7
3	5
7	5
Postoperative day after tunnelled epidural catheter + continuous infusion of morphine and midazolam	
10	3
14	2
16	0

CONCLUSION

Pain is often multifactorial and require a holistic approach. The total pain framework enables comprehensive assessment and management of physical, psychological, and social suffering. Interventional analgesic techniques while being valuable, achieve the greatest benefit when integrated into a comprehensive palliative care model focused on comfort, dignity, and quality of life.

