

Background	Case Description (continued)	Discussion	Conclusion
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Cancer and cancer treatment-related chronic pain affect a significant number of oncologic patients and this is likely to increase in the coming years as survival of these patients is increased with new technologies and therapies.

There have been observed clinical pain relieving effects of Spinal cord stimulation and Dorsal root ganglion stimulation as promising types of pain relieving interventions. The mechanism of action for dorsal root ganglion (DRG) stimulation appears to be a direct action on abnormally firing primary cell bodies in the DRG. Given the similarities in pain quality found in many cancer patients, it is crucial that we research and explore this therapeutic option in the cancer pain population.

Even after placement of intrathecal pump he continued to have increased pain at right thigh and right knee. He stated he was getting little relief from the ITP/PTMs. He required emergency admission at the cancer center and his pain was managed inpatient with the administration of hydromorphone 4-8 mg every 6 hrs as needed. Initially the plan was to increase PCA settings by 10%, however this endorsed only limited relief from ITP hydromorphone-bupivacaine and found IV PCA only minimally helpful. The decision was made after several setting changes to opt for a spinal cord stimulator in order to better manage his metastatic cancer pain. Due to severe pain that could not be managed, he was inpatient for almost 2 months and was finally discharged with alleviation of pain after successful trial and permanent placement of the spinal cord stimulator.

Cancer-related pain is associated with a decrease in quality of life.

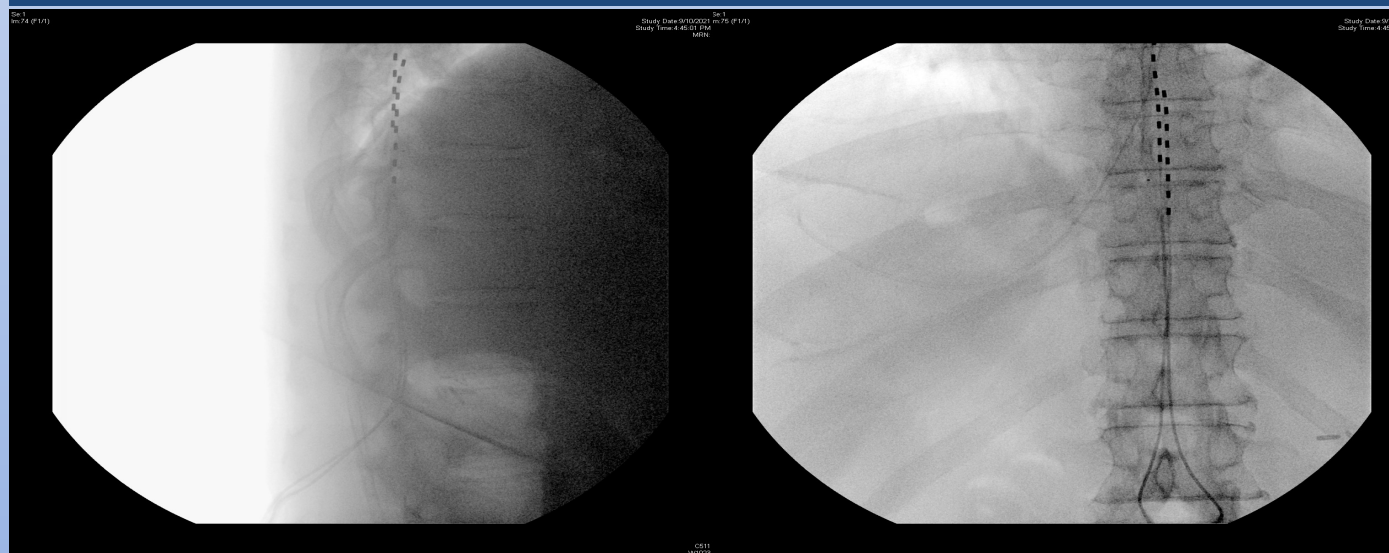
A significant proportion of patients with cancer-related pain are under-treated and more effective control of cancer-related pain is necessary for many patients.

Interventional management approaches for pain control are commonly used options and there are cases where intrathecal pump placement is not adequate enough for pain control.

The decision to opt for electric stimulation of the spinal cord to better manage this patient's symptoms was made and it was found that the spinal cord stimulator was able to better control pain symptoms to allow for a safe discharge.

- The use of Spinal cord stimulators is a novel approach in cancer related pain treatment.
- Neuromodulation may be the future for cancer pain intervention.
- There is a need for gate-controlled pain management to treat patients that are tough to manage.
- This is a case of trial and error to search for the right pain modulating therapy leading to the surgical placement of a spinal cord stimulator with successful results.
- Inadequately controlled pain has been known to extend the length of hospital stay and predispose to expensive, time-consuming complications and hospital acquired infections.
- The gate control theory of pain set up the development of spinal cord stimulation and provides another alternative when managing complex hard to manage cancer pain cases related to metastasis.

Spinal Cord Stimulation: Images from the implant



Case Description

Patient is a 63 year old male with history of metastatic renal cell carcinoma to brain and bone on pazopanib therapy. He had palliative right hip and acetabular fixation (2014) and cementoplasty (2018) and his hospital course was complicated by a septic joint with finding of group B strep where he was placed on long term antibiotics. Patient has had several admissions in the past year for acute on chronic right inguinal and thigh pain, with interventional IR cryoablation for an attempt at pain control. Due to chronic unremitting pain he was cleared for initial placement of intrathecal pump at the T10 level.

References

