



## Case Report

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# Chronic Xiphodynia Treatment with a Combined Bilateral Erector Spinae (ESP) Block and Bilateral T7 Dorsal Root Ganglion (DRG) Pulsed Radiofrequency Neurotomy (PRFN)

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## Case Presentation

An 83-year-old male presented with an epigastric pain. He had a history of non-Hodgkin lymphoma treated with chemotherapy 10 years ago. He stated his pain started after his chemotherapy and worsened over the past year. He described the pain as burning in nature, non-radiating, intermittent, 9/10 in intensity, lasting about 1 hour, and was unrelated to food. He denied any numbness or tingling. He denied other symptoms such as fever, chills, nausea, vomiting, weight loss, fatigue. He denied any upper or lower gastrointestinal tract bleeding. He denied history of rashes, shingles, and other infections. His pain affected quality of life and he was unable to tolerate it. He was unable to identify aggravating factors. He stated his pain was alleviated slightly with a heating pad. The work-up by GI physician was negative. His vitals were stable, and his physical exam was unremarkable. A contrast CT chest abdomen and pelvis showed bifid appearing Xiphoid process with no significant surrounding soft tissue inflammatory changes. A bone scan showed a small focus of mild activity in the lower sternum that may be associated with one of the rib costochondral junctions. Otherwise, no significant uptake was identified in the xiphoid process. On previous CT, the patient is known to have a prominent xiphoid process.

## Discussion

The most likely pain generators that were suspected were musculoskeletal and chemotherapy induced neuropathic pain. A deci-

sion to have a combined approach of bilateral ESP block for what was thought to be the MSK component of the pain, and bilateral T7 dorsal root ganglion pulsed radiofrequency neurotomy was made. The patient tolerated the procedure well and was discharged home the same day without complications.

The patient was followed-up after 2 weeks. He reported a 90% reduction in pain intensity, with significant improvement of quality of life. Another 2-month follow-up was done, and the patient continued to have sustained relief with only a "slightly increased" pain intensity, but not to his baseline level.

## Conclusion

A combined approach of erector spinae block and T7 Dorsal root ganglion pulsed radiofrequency neurotomy can be potentially considered as a minimally invasive interventional treatment option for patients with chronic xiphodynia. However, additional high-quality research is required to investigate adjustments to the pulsed radiofrequency stimulation settings and duration of pain reduction.

## Conflict Interest

The authors report no conflicts of interest.

