

## Dorsal Root Ganglion Neuromodulation as an Alternative to Opioids in the Evolving Healthcare Crisis

**Authors :** Adam J. Carinci

**Abstract :** Background: The opioid epidemic is the most pressing healthcare crisis of our time. There is increasing recognition that opioids have limited long-term efficacy and are associated with hyperalgesia, addiction, and increased morbidity and mortality. Therefore, alternative strategies to combat chronic pain are paramount. We initiated a multicenter retrospective case series to review the efficacy of DRG stimulation in facilitating opioid tapering, opioid discontinuation and as a viable alternative to chronic opioid therapy. Purpose: The dorsal root ganglion (DRG) plays a key role in the development and maintenance of pain. Recent innovations in neuromodulation, specifically, dorsal root ganglion stimulation, offers an effective alternative to opioids in the treatment of chronic pain. This retrospective case series demonstrates preliminary evidence that DRG stimulation facilitates opioid tapering, opioid discontinuation and presents a viable alternative to chronic opioid therapy. Procedure: This small multicenter retrospective case series provides preliminary evidence that DRG stimulation facilitates opioid weaning, opioid tapering and is a viable option to opioid therapy in the treatment of chronic pain. A retrospective analysis was completed. Visual analog scale pain scores and pain medication usage were collected at the baseline visit and after four weeks, 3 months and 6 months of treatment. Ten consecutive patients across two study centers were included. The pain was rated 7.38 at baseline and decreased to 1.50 at the 4-week follow-up, a reduction of 79.5%. All patients significantly decreased their opioid pain medication use with an average > 30% reduction in morphine equivalents and four were able to discontinue their medications entirely. Conclusion: This Retrospective case series demonstrates preliminary evidence that DRG stimulation facilitates opioid tapering, opioid discontinuation and presents a viable alternative to chronic opioid therapy.

**Keywords :** dorsal root ganglion, neuromodulation, opioid sparing, stimulation

**Conference Title :** ICPMM 2019 : International Conference on Pain Medicine and Management

**Conference Location :** London, United Kingdom

**Conference Dates :** May 23-24, 2019