THE EFFECT OF INELASTIC LUMBAR BRACING ON PATIENTS WITH CHRONIC OPIOID USE: A CASE SERIES

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BACKGROUND: Low Back Pain is a significant societal problem in the United States, affecting approximately one-fourth of all Americans at any given time. Annually, health care expenditures for individuals with back pain total over 100 billion dollars. Non-pharmacological therapies have not been well studied and evidence for use of lumbar bracing is inconclusive. **PURPOSE:** Assess how inelastic lumbar bracing may decrease opioid use in chronic low back pain patients on a stable opioid regimen. **SETTING:** Outpatient pain clinic in a tertiary care hospital. **PATIENT SAMPLE:** 65-year-old male with chronic low back pain due to facet arthropathy and sacroiliitis who has been chronically using opioids for several years. 72-year-old female with a history of lumbar radiculopathy and degenerative joint disease with a long history of opioid use. **OUTCOME MEASURES:** Primary: Opioid utilization. Secondary: pain, measured on a VAS. **DESIGN/METHODS:** Case review. **RESULTS:** After being prescribed an inelastic lumbar orthosis, both patients showed clinically significant reductions in opioid use and pain. **CONCLUSIONS:** This case series illustrates that the application of an inelastic lumbar orthosis may reduce chronic opioid use in chronic low back pain patients. Additional research is needed to evaluate the effectiveness of this type of bracing as a non-pharmacological intervention to enhance pain management in patients with chronic low back pain.

SELECTED QUOTATIONS

Case 1

"A 65-year-old-male...presented to our outpatient pain clinic with chronic low back pain located in the posterior superior iliac spine with radiation to the buttocks...the patient was taking Cymbalta 60mg per day, Norco 10/325mg five to six times a day, Soma 350mg three times a day...Over the next 18 months, long-acting opioids were started...Norco 10/325mg was continued as needed. **The patient was then given a thoracolumbosacral orthosis (Summit TLSO by Aspen Medical Products, Irvine, CA)...After one month of using the TLSO, the patient reported a decrease in his pain level from 8-10/10 to 0-3/10, on the Visual Analogue Scale (VAS) and decreased use of Norco from five-six times a day to one-two times a day."** [Emphasis added]

Case 2

"A 72-year-old-female initially presented with chronic low back pain located in the low mid back with radiation to the left anterior thigh down to the knee due to lumbar radiculopathy and scoliosis. The patient described the pain as "heavy and burning" with a pain level of 4/10 on average and 10/10 at worst...She was also treated with a lumbar steroid injection with 50% relief of pain. Thereafter, her Gabapentin dose was increased up to 600mg three times a day and Tramadol to 100mg three times a day as needed. **At this point, the patient was prescribed an inelastic lumbosacral orthosis (QuikDraw™ PRO)...she reported a 50% reduction in her pain...At her 10-month visit, the patient reported her pain level was 2/10 on the VAS...At this point...Tramadol was discontinued."** [Emphasis added]

Conclusion

"This case series suggest that the use of inelastic bracing can serve as a conservative, but safe and effective alternative intervention to decrease pain levels and opioid consumption in patients with chronic back pain who are on a stable opioid regimen."