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Case:

43 yo otherwise healthy male presented to the emergency department with lower back pain onset two weeks ago after heavy lifting at work. Pt stated the pain radiated from his left lower back into his thigh and all the way into his left foot, described as a burning pain. He had been seen in the emergency department just a week before and sent home with Norco and Robaxin as well as a scheduled outpatient MRI, but returned for unrelenting pain. Pt had no concerning symptoms for cauda equina, epidural abscess, or cord compression. Physical exam revealed positive straight leg test on left. The rest of the exam was within normal limits including a complete neurologic exam and rectal tone.

Clinical Questions:

Is there evidence for the use of **steroids in patients presenting with lower back pain?**

Evidence:

There have only been small randomized controlled trials to address the use of steroids in low back pain though the evidence is strongly **against the use of them as they do not improve pain** when compared to placebo.^{1,2} Although there has been one study showing short-term (three day) improvement with use of IV bolus of steroids.³ Of particular interest however are two recent studies done in the emergency department setting. These were small randomized controlled trials, yet they again **did not show benefit from treatment with oral corticosteroids for radicular or musculoskeletal low back pain.**^{4,5}

Conclusion:

It is hard to gauge the usefulness of this information when implementing it into practice based on the small studies above. However, one can conclude that systemic steroids do not have a strong role in the treatment of low back pain.

References:

1. Porsman O, Friis H. Prolapsed lumbar disc treated with intramuscularly administered dexamethasone phosphate. A prospectively planned, double-blind, controlled clinical trial in 52 patients. *Scand J Rheumatol* 1979; 8:142.
2. Hedeboe J, Buhl M, Ramsing P. Effects of using dexamethasone and placebo in the treatment of prolapsed lumbar disc. *Acta Neurol Scand* 1982; 65:6.
3. Finckh A, Zufferey P, Schurch MA, et al. Short-term efficacy of intravenous pulse glucocorticoids in acute discogenic sciatica. A randomized controlled trial. *Spine (Phila Pa 1976)* 2006;31:377.
4. Friedman BW, Esses D, Solorzano C, et al. A randomized placebo-controlled trial of single-dose IM corticosteroid for radicular low back pain. *Spine (Phila Pa 1976)* 2008; 15;33(18):E624-9.
5. Eskin B, Shih RD, Fiessler FW, et al. Prednisone for emergency department low back pain: a randomized control trial. *J Emerg Med* 2014; 47(1):65-70.