POEMs

Epidural Steroids for Sciatica Minimally Effective in the Short Term

Clinical Question

Are epidural corticosteroid injections effective in decreasing pain and improving function in patients with sciatica?

Bottom Line

Epidural corticosteroid treatment produces a small and not clinically relevant decrease in leg pain and disability in the short term in patients with sciatica; any difference is gone after one year. (Level of Evidence = 1b)

Synopsis

These researchers searched six databases, including Cochrane CENTRAL, and identified 23 randomized controlled studies comparing epidural corticosteroid with placebo. Two reviewers independently screened the studies, extracted the data, and graded the evidence. The study quality was generally high, although most studies did not conceal allocation or use intention-to-treat analysis, which could have biased the results in favor of treatment. There was no evidence of publication bias, and heterogeneity was low to absent. Epidural corticosteroid treatment resulted in a small difference for leg pain (6.2 on a scale of 0 to 100) and disability (3.1) and no difference in back pain scores. Results did not differ by injection approach. There was no difference among treatments after one year.

Reference

Pinto RZ, Maher CG, Ferreira ML, et al. Epidural corticosteroid injections in the management of sciatica: a systematic review and meta-analysis. Ann Intern Med. *2012;157(12):865-877.*

Study design: Randomized controlled trial (double-blinded)

Funding source: Self-funded or unfunded

Setting: Various (meta-analysis)

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Most Antibiotics Similar in Efficacy for Lower UTI

Clinical Question

What is the best antibiotic for the treatment of uncomplicated lower urinary tract infection (UTI)?

Bottom Line

This network meta-analysis found that the antibiotics commonly used to treat lower UTI are similar in efficacy, with one exception: amoxicillin/clavulanate (Augmentin) is significantly less effective than the others. (Level of Evidence = 1a)

Synopsis

A network meta-analysis is a technique that allows a researcher to compare two treatments via a common comparison group. For example, if one study compared drug A with drug B, and a second study compared drug B with drug C, a network meta-analysis allows us to indirectly compare drug A with drug C. This study compared antibiotics for the treatment of lower UTI. After a careful search, a total of 10 studies comparing eight antibiotics were identified. The authors looked at microbiologic and clinical outcomes; the most important were short-term and long-term clinical cures and adverse effects. The authors included studies of symptomatic women with available culture results, and they combined different durations of therapy for a given antibiotic into a single arm of the network meta-analysis. The short-term and long-term clinical cure rates were not significantly different among trimethoprim/sulfamethoxazole, norfloxacin (Noroxin), nitrofurantoin (Furadantin), and gatifloxacin (Tequin); amoxicillin/clavulanate, however, was less effective. Ciprofloxacin (Cipro) and gatifloxacin were somewhat more effective in the short term. Harms were similar among the drugs.

Reference

Knottnerus BJ, Grigoryan L, Geerlings SE, et al. Comparative effectiveness of antibiotics for uncomplicated urinary tract infections: network meta-analysis of randomized trials. Fam Pract. *2012;29(6):659-670.*

Study design: Meta-analysis (randomized controlled trials)

Funding source: Self-funded or unfunded

Setting: Various (meta-analysis)

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