

Tetracyclines equally effective for acne vulgaris

Clinical question

What is the most effective way to use tetracyclines for the treatment of acne vulgaris?

Bottom line

There is no difference between tetracyclines regarding their efficacy in reducing lesion counts in acne. Although minocycline and doxycycline cost more, they require only once-daily dosing and may be better tolerated. There is no clear advantage to higher doses. (LOE = 1a-)

Reference

Simonart T, Dramaix M, De Maertelaer V. Efficacy of tetracyclines in the treatment of acne vulgaris: a review. *Br J Dermatol* 2008;158:208-216.

Study Design

Meta-analysis (randomized controlled trials)

Funding

Unknown/not stated

Setting

Outpatient (any)

Synopsis

Tetracyclines have antiinflammatory and antibacterial properties and are recommended for the treatment of moderate to severe acne vulgaris. In this systematic review, the authors identified clinical trials of tetracycline (48), minocycline (29), doxycycline (10), and lymescycline (7) and included a total of 57 studies after excluding for fewer than 6 patients, duplicate publication, combination therapies, recent antibiotic therapy, specific forms of acne, non-English language, and crossover studies. The authors focused on lesion count (inflammatory and noninflammatory) as the most objective and widely used outcome measure. Only 7 studies had more than 100 patients, only 22 were double-blinded and only used intention-to-treat analysis, and none lasted more than 24 weeks. Studies comparing different drugs found no consistent difference in the effect on inflammatory or noninflammatory lesion counts. There was no difference in efficacy over time, which might have happened if resistance had occurred. There was also no benefit to higher doses.

Oral prednisolone is equal to naproxen in acute gout

Clinical question

Do oral prednisolone and naproxen have similar effectiveness in the initial treatment of patients with acute gout?

Bottom line

Oral prednisolone and naproxen are equivalent in treating acute gout. (LOE = 1b)

Reference

Janssens HJ, Janssen M, van de Lisdonk EH, van Riel PL, van Weel C. Use of oral prednisolone or naproxen for the treatment of gout arthritis: a double-blind, randomised equivalence trial. *Lancet* 2008;371:1854-1860.

Study Design

Randomized controlled trial (double-blinded)

Funding

Foundation

Allocation

Concealed

Setting

Outpatient (primary care)

Synopsis

Colchicine, long the gold standard in treating acute gout, has a narrow therapeutic window and cannot be used in patients with kidney failure. Nonsteroidal antiinflammatory drugs (NSAIDs) have been used more frequently in recent years, but their gastrointestinal toxicity, especially in the elderly, is problematic. Oral steroids are an attractive potential alternative since the short-term side effects are fairly mild. These researchers designed this study to see if oral prednisolone and naproxen were equivalent in treating patients with acute gout. Primary care physicians in the Netherlands were asked to refer any patient with acute monoarthritis to the study, even if gout was not the likely diagnosis. Within 1 day of referral, the patients had the joint fluid aspirated and evaluated for monosodium urate crystals. The authors excluded patients with unstable medical conditions, chronic rheumatic diseases, and upper gastrointestinal disorders. Patients were not allowed to use NSAIDs, colchicine, or other analgesics within 24 hours of enrollment or during the follow-up period. The patients were randomly assigned to receive prednisolone 35 mg once daily plus look-alike naproxen placebo twice daily (n = 60) or 500 mg naproxen twice daily plus look-alike prednisolone placebo once daily (n = 60). The researchers evaluated the patients for up to 3 weeks after enrollment. They analyzed the data by intention to treat. The study was designed to be powerful enough to detect moderate differences in pain (30 mm on a 100-mm scale). Only one patient in each group had incomplete data. Although both treatment groups had significant pain relief from baseline to follow-up, there was no significant difference in pain improvement or impairment between the 2 groups. Approximately two thirds of patients in each group reported no treatment side effects. The rate of side effects was identical in each group for: gastric or abdominal pain (15%); itching or dizziness (7%); and dyspnea or palpitations (5%). Approximately 20% in each group experienced "other side effects." By 3 weeks, all patients reported complete relief from the initial attack and no patients had a recurrence.

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