



from the

DRUG DESK

A Drug Information Update from the B.C. Drug and Poison Information Centre

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Reviewer: Laird Birmingham, MD, MHSc, FRCP

Pharmacist had a 45-year-old female patient come in with a prescription for colchicine 0.6 mg q2h to a maximum of 6 tablets per day (3.6 mg daily) x 20 tablets for an acute gout attack. She has normal renal function, but has proteinuria. The pharmacist found a reference that suggested a lower dose of 1.8 mg per day and would like to know what the recommended maximum dose of colchicine is for an acute gout attack.

Colchicine is indicated for acute gout attacks.¹ It is considered a first-line medication for acute gout when NSAIDs are contraindicated.² Dosing guidelines vary according to the reference source, which may lead to confusion regarding safe and effective dosing.

For the treatment of an acute gout attack, an initial dose of colchicine 1.2 mg po followed by 0.6 mg one hour later is recommended (i.e. maximum dose is 1.8 mg).^{1,3,4} For prophylaxis, colchicine doses up to 1.2 mg daily are recommended.¹ Older sources report higher prophylactic dosing guidelines, e.g. 1-1.2 mg initially followed by 0.5-1.2 mg q1-2h until relief of gout pain or gastrointestinal (GI) toxicity occurs or a maximum colchicine dose of 4-8 mg is reached.^{5,6} This change in colchicine dosing recommendation is supported by the AGREE trial.⁷

The AGREE trial was a randomized, double-blind, placebo-controlled, parallel-group study (n=575) that compared a high-dose colchicine regimen to low-dose and placebo groups. The high-dose regimen consisted of 1.2 mg initially followed by 0.6 mg q4h up to 4.8 mg total, while the low-dose regimen consisted of 1.2 mg followed by 0.6 mg in one hour (1.8 mg total). The numbers of patients achieving the primary endpoint of 50% or greater pain reduction at 24 hours (on a 0-10 Likert scale) was not statistically significantly different between the two groups, but both were significantly superior to placebo (32.7% for high dose vs 37.8% for low dose vs 15.5% for placebo). The high-dose group experienced significantly more GI adverse events (76.9% vs 25.7% in the low-dose group and 20.3% in the placebo group).

Recommendation:

The dose of colchicine prescribed for this patient was within the previous limits of colchicine dosing. However, a new lower dosage regimen is preferred because it is as effective on gout pain and has fewer GI adverse events. Colchicine 1.2 mg initially, followed by 0.6 mg one hour later should now be recommended for an acute attack of gout.

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References available upon request.