

CRYSTAL ARTHRITIS

The secret of successful long-term gout therapy

In the treatment of gout, a decreased rate of flares and the resolution of tophi are desirable clinical outcomes often associated with the reduction of serum urate (SUA) concentrations to below 6.0 mg/dl. Two previous short-term, phase III studies showed that the urate-lowering efficacy of 80 or 120 mg febuxostat is superior to that of allopurinol at commonly employed doses of 300 mg daily. Becker *et al.* have now demonstrated that febuxostat is safe and effective in the long-term.

“...maintaining [serum urate] levels <6 mg/dl improves the clinical manifestations of gout...”

An *ad-hoc* analysis of data from the initial phase III trials suggested that maintenance of target SUA concentrations for 1 year reduces gout flare. This finding

prompted Becker *et al.* to determine whether target SUA levels could be maintained for up to 3 years with further reductions in gout flares. Patients were administered febuxostat (80 or 120 mg) or 300 mg of allopurinol daily, and were permitted to switch dosage or agent within the first 6 months. Treatment reassignment was more frequent in patients initially treated with allopurinol than in those treated with febuxostat. The authors suggest that this increased reassignment rate might be a result of inadequate allopurinol dosing, and although the agent is approved for use at doses of up to 800 mg, it is rarely prescribed above 300 mg.

Following treatment reassignment, more patients who switched to febuxostat achieved target SUA levels compared with those who switched to allopurinol. Over the 3-year treatment period, target SUA levels were maintained in over

80% of patients. Maintenance of SUA levels at <6.0 mg/dl was associated with near-complete cessation of gout flares and resolution of most tophi over time. Adverse events were similar with both treatments, but a slight increase in the incidence of cardiovascular events with febuxostat warrants further study.

These results strengthen previous observations that maintaining SUA levels below 6.0 mg/dl improves the clinical manifestations of gout, and that this goal of urate-lowering may be more readily achievable with febuxostat than allopurinol at the doses currently employed.

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Original article Becker, M. A., Schumacher H. R., MacDonald, P.A., Lloyd, E. & Lademacher, C. Clinical efficacy and safety of successful longterm urate lowering with febuxostat or allopurinol in subjects with gout. *J. Rheumatol.* doi:10.3899/jrheum.080814