



ADVERSE DRUG REACTIONS, INCLUDING SJS, TEN

## **SUCCESSFUL DESENSITIZATION TO FEBUXOSTAT IN A PATIENT WITH RECALCITRANT GOUT AND A HISTORY OF HYPERSENSITIVITY REACTIONS TO BOTH FEBUXOSTAT AND ALLOPURINOL**

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Background: Gout, although a treatable disease, if poorly-controlled, may lead to recurrent attacks resulting in joint deformity and impaired quality of life. The gold standard for treatment is xanthine oxidase inhibitors, such as Febuxostat and Allopurinol. Unfortunately, many patients develop severe, hypersensitivity reactions to this class of medication.

Rapid drug desensitization protocols are used to induce immunologic tolerance in patients with IgE-mediated allergic reactions. Less commonly, a slow drug desensitization protocol can be used in patients with non-IgE-mediated reactions. To our knowledge, we are the first in North America to report successful desensitization to Febuxostat in a patient with a recurrent morbilliform rash.

Observation: A 42-year-old male presented with a history of poorly-controlled gout. He had previously tolerated Allopurinol, however when placed on a combination of Allopurinol and Bupropion, developed an exfoliative dermatitis that resolved following medication discontinuation.

Subsequently, he was trialed on Febuxostat, and developed a morbilliform rash. He was re-challenged and developed a similar rash. Discontinuation of the medication during both flares led to its resolution.

The patient went on to have frequent debilitating attacks of gout unresponsive to other medications. It was thus decided to pursue desensitization in the hopes of reinitiating a xanthine oxidase inhibitor. He was HLA-B\*58:01 positive, indicating a high risk of severe cutaneous adverse reaction to Allopurinol. Therefore, Febuxostat was chosen for desensitization. The patient successfully underwent a slow desensitization protocol to Febuxostat over two weeks, to a maintenance dose of 80 mg daily. He had no further adverse reactions to Febuxostat and no gout flares 8 months following desensitization.

Key message: In the absence of severe adverse drug reactions, desensitization protocols may





be considered in selected patients in whom no alternative treatment options are available. However, drug desensitization is a high risk procedure that must be undertaken only by highly qualified specialists.

