18. FEBUXOSTAT THERAPY FOLLOWING ALLOPURINOL-INDUCED PSEUDOLYMPHOMA: SAFE AND EFFECTIVE
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Background: Gout is a painful and debilitating arthritis. With increasing longevity and obesity, without intervention, an epidemic appears inevitable. Allopurinol, the first-line urate lowering therapy (ULT), is associated with numerous and potentially life-threatening, cutaneous reactions. Where adverse events have occurred uncertainty surrounding the safety of subsequent ULT exists. Newer treatments, such as febuxostat, are becoming available, but post marketing experience of these drugs is still limited. We report a case of allopurinol induced pseudolymphoma that spontaneously resolved on cessation of allopurinol and concurrent introduction of an alternative ULT, febuxostat. This strategy prevented the significant morbidity and costs associated with an acute flare of gout.

Methods: A 61 year old man presented with chronic polyarticular, tophaceous gout. Intermittent colchicine, etoricoxib and lifestyle modification had inadequately controlled his symptoms. He had a family history of gout and previous nephrectomy for renal cell carcinoma (eGFR 50, Cr 120 μmol/l). His urate was 610 μg/l (10.6 mg/dl). Allopurinol, with colchicine prophylaxis, was introduced and cautiously titrated. At 300 mg he achieved disease remission and target urate levels [286 μg/l (4.8 mg/dl)]. A year after allopurinol introduction he developed itchy, erythematous cutaneous nodules over his chest, trunk and limbs. He remained well and routine blood tests unremarkable. Histology was consistent with cutaneous nodular T-cell pseudolymphoma. Drug induced pseudolymphoma was suspected; the drugs most commonly implicated being anticonvulsants, sulphonamides and allopurinol.

Results: The patient was eager to continue ULT so, following discussion, allopurinol was stopped and febuxostat 80 mg OD started. His gout remained in remission and the pseudolymphoma resolved within a month. A year into treatment there has been no evidence of recurrence.

Conclusion: Pseudolymphomas are a heterogeneous group of benign reactive T- or B-cell lymphoproliferative lesions. Detailed immunohistochemical and genetic analysis suggests that cutaneous lymphomas and pseudolymphomas are polar extremes of a spectrum. Pseudolymphomas have been observed to transform into lymphomas which cannot be predicted by the presence of a monoclonal infiltrate. Failure of lesions to resolve within months of drug modulation should raise suspicion for a malignant process and trigger further investigation. The xanthine oxidase (XO) inhibitor allopurinol is a purine analogue structurally resembling naturally occurring bases. Allopurinol and its metabolic derivatives consequently inhibit multiple enzymes in purine and pyrimidine pathways, hence its pleiotropic adverse effects. In contrast febuxostat non-competitively blocks the molybdenum pterin active site of XO only and does not affect purine/pyrimidine metabolism. There is therefore scientific rationale that fewer, less multifarious reactions should be seen with febuxostat than allopurinol. We found no published reports of febuxostat induced...
pseudolymphoma. We propose febuxostat as a safe alternative ULT in patients with allopurinol induced pseudolymphoma. A direct switch avoided the significant morbidity associated with acute gout and did not delay resolution of the pseudolymphoma.

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