

Single Centre Experience of Use of Rasburicase for the Treatment of Refractory Gout



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Abstract Ref No. 21A134

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Introduction

Gout, a common inflammatory arthropathy characterize by deposition of monosodium urate crystals in joints and other tissues, affects 2% adult men in Western countries.

Aims/Background:

Rasburicase, has a lower incidence of hypersensitivity reactions than the previously available nonrecombinant enzyme uricozyme.

We don't have data about its use owing to the absence of clinical studies of rasburicase in patients with gout.

Methods:

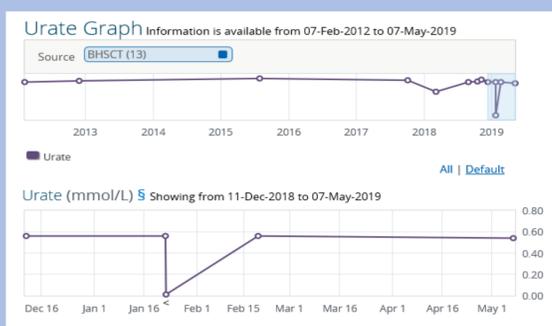
In this retrospective observational study, we investigated use of rasburicase for refractory gout at our centre.

This has been used for 3 patients who had been intolerant or refractory to conventional urate lowering medications. Dose used was 0.2mg/kg IV once monthly with methylprednisolone used as premedication.

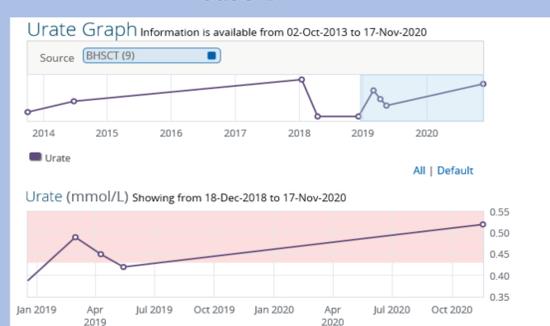
Case B. 47 ♂ diagnosed with polyarticular tophaceous gout at the age of 28. Allopurinol was ineffective even at dose 700mg/day. Febuxostat was found ineffective. Rasburicase was started in April 2019. Although there was marked reduction in urate levels, but this drug had to be stopped after 3rd dose due to hypersensitivity type reaction.

Case C. 70 ♂ polyarticular crystal confirmed gout referred in 2010, was also positive for low titer RF and anti-CCP. Allopurinol and Febuxostat were stopped due to side effects. Benzbromarone stopped due to transaminitis. Rasburicase, started in November 2020, resulted in reduced frequency of gout attacks and also reduction in serum urate levels. But this benefit was lost over next 6 months. Because of loss of efficacy and ongoing side effects, Rasburicase was stopped in April 2021.

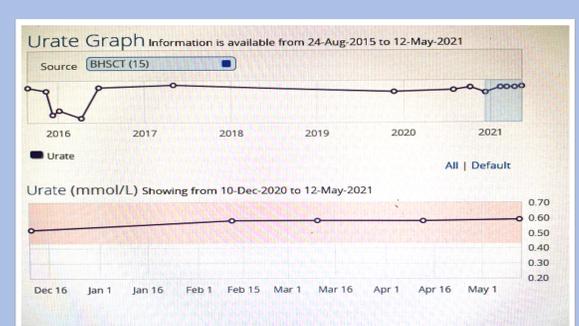
Case A



Case B



Case C



Results:

Case A. 64 ♂ with polyarticular erosive tophaceous gout was intolerant to higher doses of allopurinol, and it was ineffective at tolerable dose of 400mg per day. Febuxostat was ineffective. Benzbromarone caused significant transaminitis. Finally, patient started on rasburicase in October 2018 and it resulted in significant reduction of urate and size of gout tophi. But this treatment had to be discontinued after 4 months due to severe allergic reaction.

Conclusions:

Although we have found Rasburicase effective in all cases in reducing serum urate levels and gout flares' frequency, but its longer use was limited due by significant allergic reactions and other side effects.

There is a need of larger multicenter prospective studies to prove Rasburicase in treating refractory gout.