



ABS002

EFFICACY OF FIXED LOW DOSE RASBURICASE IN THE PREVENTION AND TREATMENT OF TUMOR LYSIS SYNDROME

Remya Antony*¹

Sandhya Lakshmi¹,
Akhila Sivadas²,
Wesley M Jose³, Neeraj
Sidharthan⁴,
K Pavithran⁵

¹Pharm.D final year,
Amrita School of
pharmacy

²Clinical pharmacist,
Department of Oncology,

³Assosiate Professor,
Department of Medical
Oncology & Hematology;

⁴Assosiate Professor,
Department of
Hematology;

⁵ Head of the
Department, Medical
Oncology & Hematology.

Amrita Institute of
Medical Sciences
(AIMS), Kochi

Tumour Lysis Syndrome (TLS) is a serious complication of malignancies and can result in renal failure or death. Hyperuricaemia is one of the prominent features of TLS which if not adequately prevented or treated can lead to renal failure requiring dialysis.

Rasburicase is the most recent agent indicated for treating TLS which is a recombinant urate oxidase enzyme that will oxidize uric acid to allantoin, a metabolite with 5-10 fold greater solubility than uric acid and reduces serum uric acid (SUA) levels within four hours of administration.

The recommended dose according to US Food and Drug Administration is 0.15 to 0.2 mg/kg/d for 5 days.

This retrospective study was aimed to evaluate the clinical efficacy of fixed low dose Rasburicase (1.5mg) in hyperuricemic patients who was admitted under Medical Oncology, Department in Amrita Institute of Medical Sciences And Research Centre, Kochi.

55 patient received Rasburicase during the study period of approximately 3years (July 2012 - June2015). 52 patients (94.54%) showed reduction in serum uric acid level in day 1 and by day 3.All patients (100%) had significant reduction in SUA after administration.

In this study we found that Rasburicase significantly lowered the serum uric acid level. Single dose of 1.5mg of rasburicase was found to be effective in rapidly correcting the hyperuricemia in all these patients.

This can lead to considerable cost saving in the treatment and prevention of TLS occurring in patients with both solid tumors and hematological malignancies.

The advantage of Rasburicase over Allopurinol is its rapid onset of action, efficacy in patients with renal dysfunction and is well tolerated with very few side effects.

Keywords: *Tumour Lyses Syndrome, Serum Uric Acid, Rasburicase*