LETTER TO THE EDITOR

(J Bangladesh Coll Phys Surg 2011; 29: 180-181)

To Editor in Chief

Journal of Bangladesh College of Physician and Surgeon

At first I would like to thank to the editor for publishing the time demanding review on Treatment of Gout and Hyperuricemia (April Vol 29, No2,2011 Page 85-95). Both specialist and non-specialist should know the recent update about hyperuricemia and gout .As we are adopting western life style day by day, the incidence of metabolic syndrome including gout may increase in future.

I have gone through the article and have certain observations. The content and illustration of the articles were very nice and informative. A systematic review with Pubmed, embase or Cochrane collaboration for specific duration of time would have been more informative in review process. The article reviewed a number of papers but did not mention the mesh or key wards used for generating the search. The review almost covers everything regarding gout but recent update of treatment was not included. I would like to draw your attention to the new advancement that have taken place in the field of treatment of gout in recent past.

Genetic advances with the identification of the urate anion transportor (URAT-1) and genetic variation in SLC 2A9 as a key regulator of urate homoeostasis, have given us deeper understanding of the pathophysiology of gout, and also allow for more targeted treatments^{1,2}. Hopefully, new and emerging therapeutic options will reduce treatment-resistant gout in patients who are unresponsive or unable to take traditional urate lowering therapy. In 1996, rasburicase was developed by recombinant DNA technique from a genetically modified strain of Saccharomyces cerevisiae. Rasburicase is given IV at a dose of 0.20 mg/kg for 5-7 days to treat tumour lysis syndrome $(TLS)^3$. Rasburicase is successfully used in gout with renal transplant patients and patients intolerant to allopurinol.4,5 PEG-uricase is another potentially powerful agent for treating refractory gout in those who are unable to tolerate other treatments. PEG-uricase is effective in resolving tophi⁶ and could have a role in 'debulking' tophi in advanced gout before switching to another agent for maintenance treatment⁴. Losartan, an angiotensin II receptor antagonist used for hypertension, and fenofibrate, a fibric acid derivative used in hyperlipidaemia, both have uricosuric actions and reduce Serum uric acid(sUA)⁷. This effect of losartan and fenofibrate on sUA is particularly beneficial, given the frequent co-existence of hypertension and hyperlipidaemia with gout.

Anakinra, an IL-1 receptor antagonist, is a new treatment in development. an open-labelled pilot study have shown subcutaneous injections of anakinra 100 mg daily to be a safe and efficacious treatment of flares. In addition to anakinra, other IL-1 inhibitors are in development such as rilonacept, which is currently undergoing Phase III trials .Novel therapies including febuxotat, Anakirna and PEG- uricase offer hope to patient groups previously difficult to treat.

Traditionally, gout was viewed as a disease of the privileged, but is now increasingly prevalent among the lower socio-economic classes who have high rates of obesity and diabetes. More is known about which life style factors protect or cause gout. However, despite significant advances in understanding and exciting developments of new treatments, the management of gout remains sub-optimal in primary and secondary care. So, treatment of gout is necessary to learn by every physician in this respect.

Dr. Aparna Das

Asst. Prof. Dept. of Medicine Dhaka Medical College

References:

- Graessler J, Graessler A, Unger S, et al. Association of the human urate transporter 1 with reduced renal uric acid excretion and hyperuricemia in a German Caucasian population. Arthritis Rheum 2006;54:292-300
- Enomoto A, Kimura H, Chairoungdua A,et al. Molecular identification of a renal urate-anion exchanger that regulates blood urate levels. Nature 2002;417:447-52.
- Schumacher HR, Chen LX. Newer therapeutic approaches: gout. Rheum Dis Clin North Am 2006;32:235-44.
- Vogt B.. Urate oxidase (rasburicase) for treatment of severe tophaceous gout. Nephrol Dial Transplant 2005;20:431-3.
- Richette P, Bardin T. Successful treatment with rasburicase of a tophaceous gout in a patient allergic to allopurinol. Nat Clin Pract Rheumatol 2006;2:338-42.
- Baraf HS, Becker M, Edwards NL, et al. Tophus response to pegloticase (PGL) therapy: pooled results from gout1 and gout2, PGL phase 3 randomized, double blind, placebocontrolled trials. In: ACR Conference Proceedings. Abstract 22, 2008
- Nuki G, Simkin P. A concise history of gout and hyperuricemia and their treatment. Arthritis Res Ther 2006;8:S1.
- So A, De Smedt T, Revaz S, Tschopp J. A pilot study of IL-1 inhibition by anakinra in acute gout. Arthritis Res Ther 2007;9:R28.

.

Authors Reply

We feel pleasure to get a feedback about the review on 'Treatment of hyperuricemia and gout'. Its really appreciating that Dr. Aparna Das has read the article thoroughly and between the lines. She has rightly mentioned the key words were not used and we deliberately omitted it is not practiced in BCPS journal. Regarding the option of drugs, if we would include all, the article would be more voluminour and divert the attention of the the readers from the most relevant one, therefore we tried to pick up the most pertinent one, although we talked on IL-1 antagonist in out abstract

and we also talked on uricsse especially pegluticase. Drugs like ascorbic acid also now considered to be an adjunct in treatment of Gout.

Finally, we would like to thank the reader again for the suggestions in this article and keen interest in the field of rheumatology.

Warm regards **Dr. Minhaj Rahim Choudhury**Associate Professor of Rheumatology

Dept. of Medicine

BSMMU, Dhaka