LETTER TO THE EDITOR

Comments on "Serum Urea: Albumin Ratio as a Prognostic Marker in Critical Patients With Non-chronic Kidney Disease"

Kirtimaan Syal

Received: 26 March 2014/Accepted: 2 April 2014/Published online: 26 April 2014 © Association of Clinical Biochemists of India 2014

Sir,

I read the article "Serum Urea: Albumin Ratio as a Prognostic Marker in Critical Patients With Non-Chronic Kidney Disease" by Gundpatil et al. with great interest. I congratulate authors for making this important observation. It deals with the determination of significance of urea: albumin ratio (UAR) as prognostic marker in estimating the ICU stay and mortality of patients admitted in ICU [1]. I would like to make the following comments on this article.

Authors have related the high levels of urea with prerenal azotemia, subclinical renal dysfunction and negative nitrogen balance attributed to high protein catabolism. I would like to add that there could be excess production of urea due to various other reasons like increased production of urea in the liver by metabolism of drugs like tetracycline and corticosteroids, and high protein diet [2]. So we should consider these factors before making any prognosis related predictions. Also, decreased elimination of urea due to dehydration or infection may give false positive results.

Similarly, low albumin levels may be due to ailments like Crohn's disease [3] and low protein diet may give false negative results. Therefore, we should be cautious in considering UAR as prognostic marker. Also, UAR may vary among patients. New prognostic markers should be searched for making the prognosis prediction more accurate. I hope that the above-mentioned points might add to the article by Gundpatil et al.

References

- 1. Gundpatil DB, Somani BL, Saha TK, Banerjee M. Serum urea: albumin ratio as a prognostic marker in critical patients with non-chronic kidney disease. Indian J Clin Biochem. 2014;29(1):
- 2. Hamberg O. Regulation of urea synthesis by diet protein and carbohydrate in normal man and in patients with cirrhosis. Relationship to glucagon and insulin. Dan Med Bull. 1997;44(3):225-41.
- 3. Weeke B, Jarnum S. Serum concentration of 19 serum proteins in Crohn's disease and ulcerative colitis. Gut. 1971;12(4):297-302.

K. Syal (⊠)

Department of Experimental Medicine and Biotechnology, Post Graduate Institute of Medical Education and Research, Chandigarh, India

e-mail: kirtimaan.micro@gmail.com

Present Address: K. Syal

Molecular Biophysics Unit, Indian Institute of Science, Bangalore, India

