

## LETTER TO THE EDITOR

### USE OF SINGLE VOIDED URINE SPECIMEN FOR ESTIMATION OF QUANTITATIVE PROTEINURIA

Dear editor,

I found the article "Use of Single voided urine specimen for estimation of quantitative proteinuria." by Sharma et.al concluding that the spot urine protein – creatinine ratio is reliable method to extrapolate 24 hours proteinuria in patients with normal renal function and mild to moderate chronic renal failure.<sup>1</sup> is very useful in country like ours. I would like to highlight some points.

Proteinuria is one of the commonest presentations of renal disease and quantitative estimation is required for diagnostic, therapeutic and prognostic significance.<sup>2</sup>

The writers has clearly pointed out that prolong collection of urine is inconvenient in collection and transportation and also findings may be inaccurate due to frequent collection errors. Slight variation in the time of collection or missing a sample would exaggerate the value. Use of spot urine sample protein-creatinine ratio for estimation of 24 hours proteinuria is convenient, less time consuming and reliable tools.<sup>1</sup> This newer method is especially valuable in our set up where patients come from far off and health awareness is minimum.

I think there are few points to be considered with this method of spot urine sample. Sometimes proteinuria is not uniform; there may be diurnal variation. So value may be different in different sample though it is estimated from protein – creatinine ratio. It is also not valid in case of functional proteinuria, which refers to transient proteinuria during fever, exposure to cold, emotional stress, CCF or obstructive sleep apnoea.<sup>3</sup> It is unreliable in case of intermittent proteinuria, in which half of the urine sample has protein. It may not be reliable in postural proteinuria in upright position.<sup>4</sup>

Though it is easier to perform, inexpensive and less time consuming. I think further trials are required for validation of this method in our laboratory and population.

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### REFERENCE

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4. Larson T. Evaluation of proteinuria. *Mayoclinic proc*, 1994; p.69.

### SPOT URINE PROTEIN / CREATININE RATIO

Dear editor,

The cross sectional study design to determine whether protein/creatinine ratio is reliable indicator of 24 hours urinary protein estimation in patient with varying degree of proteinuria and renal function in our population<sup>1</sup> tries to find out the use of single voided urine specimen for estimation of quantitative proteinuria. I think following facts and conditions should be highlighted.

Proteinuria is considered as a marker of renal disease and is the single best predictor of disease progression. Reducing urinary protein excretion slows the progressive decline in renal function in both diabetic and non-diabetic kidney diseases.<sup>2</sup>