Published in: Nephrology Dialysis Transplantation (2006), vol. 21, iss. 11, pp. 3333. Status: Postprint (Author's version)

Renal extraction of cystatin C

Pierre Delanaye¹, Etienne Cavalier², Jean Paul Chapelle², Jean Marie Krzesinski¹, Marc Froissart³

¹Department of Nephrology and ²Department of Clinical Chemistry University of Liège CHU Sart Tilman Liège, Belgium ³Department of Physiology University of Paris 5 René Descartes HEGP AP-HP, Paris France

Sir,

Cystatin C is considered as a new marker of glomerular filtration rate (GFR). However, studies on its renal physiological handling are lacking [1], making the study of van Rossum *et al.* interesting [2]. Nevertheless, we have some comments. Firstly, as contrast injection may induce acute variation in intrarenal haemodynamics, it would be of interest to know the timing of the sampling procedure in relation to iodine injection [3]. Secondly, the authors have described large absolute and relative variations in cystatin extraction compared with iothalamate extraction. No systematic bias could be detected, and opposite ratios are observed in both kidneys of individual patients. This could be explained in part by the high analytical coefficient of variation (CV_a) reported for the cystatin measurements (11.3% for 1.4mg/l). This CV_a must still be higher in the patient samples (and not the controls given by the manufacturer DAKO). The use of sodium citrate tubes is also questionable as it is never recommended in immuno-assays. Performing the cystatin in triplicate will not change this limiting fact. Thirdly, the authors confirm the tubular secretion of iothalamate [4]; however, iothalamate has been used as a GFR 'reference' measure in most important studies [5]. We would be interested in the authors' opinion on this topic.

Conflict of interest statement.

None declared.

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