Plasma Oxalate in Chronic Renal Failure and Normal Subjects: Methodological Problems

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Dear Sir,

The results of serum oxalate determinations in normal subjects reported by Borland et al. [1] in their recent paper (0–55 $\mu\text{mol/l}$) are far out of the range found in normal subjects as determined by in vivo isotope clearance methods (below 3 $\mu\text{mol/l}$) [2]. The reason why in many earlier studies in which chemical methods were used concentrations are reported exceeding these low values by one order of magnitude is not clear [3], but in more recent studies [2,3, 6–13] normal values much closer to the true value were

found, i.e. at least lower than 6 $\mu\text{mol/l}$ (table I). None of these studies are cited or discussed by the authors. Their findings in pathologic conditions, such as the normal values in far advanced renal insufficiency, the influence of protein restriction, and the ‘rapid fall of plasma oxalate to near normal values during dialysis’ are at variance with recently published data [4–6] and cannot be accepted on methodological grounds. Therefore, the validity on the authors conclusions is a least questionable.

Table I. Reported normal reference values for plasma oxalate (in $\mu\text{mol/l}$) in order of decreasing magnitude

Enz. = Enzymatic; Pot. = potentiometric; Spectr. = spectrophotometric; GC = gas chromatographic; Col. = colorimetric; Isot. = in vivo isotope clearance.

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