



Dialysate calcium concentrations in hemodialysis - a linear mixed effects model

Omar C. N. Pereira
UEM, Maringa, Brazil - pereiraomar@hotmail.com

Paulo V. C. Pereira
UEM, Maringa, Brazil - paulo3883@gmail.com

Paulo R. A. Torres
UEM, Maringa, Brazil - paulotorres@uol.com.br

Rosangela G. Santana
UEM, Maringa, Brazil - rgsantana@uem.br

Isolde Previdelli
UEM, Maringa, Brazil - itsprevidelli@uem.br

We investigated the longitudinal changes the serum calcium concentration due to changes in the calcium concentration in the dialysis bath. Over three years, 98 hemodialysis patients received three different calcium concentration dialysis bath, 3.5 mEq/L; 2.5 mEq/L; and 3.0 mEq/L. Both serum calcium concentration and parathyroid hormone (PTH) were recorded over time. Linear mixed effects model was fitted to longitudinal data of serum calcium concentration. It showed that serum calcium are clossely associated with calcium concentration in dialysate. The bath with calcium at 3.0% seems to be the most suitable.

Keywords: Serum calcium; dialysate calcium; chronic kidney disease.