Hypovitaminosis D in pediatric patients on renal replacement therapy

Hipovitaminosis D en pacientes pediátricos en terapia de sustitución renal

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Background: Hypovitaminosis D has a high prevalence among patients with chronic kidney disease (CKD). Aim: To determine the prevalence of 25 hydroxy vitamin D (25(OH) D) insufficiency and deficiency in pediatric patients on dialysis and kidney transplantation. Material and Methods: Serum calcium and phosphorus, parathormone (PTH), alkaline phosphatases and 25 (OH)D were measured in 13 children on hemodialysis (HD), 18 on peritoneal dialysis (PD) and 53 that received an allograft (Tx), aged 9.8 ± 4.6 years (51% females). Results: Fifty four percent of patients had height Z score less than -1.88. Patients on HD had the lowest values. The average time of replacement therapy was 2.9 ± 2.8 years. Mean 25(OH)D levels in all was 18.7 ± 10.7ng/ml (HD: 21 ± 16.8, PD: 18.9 ± 8.5, Tx: 18.1 ± 9.72 ng/ml). Eighty eight percent of patients had levels below 30 ng/ml. Mean of serum calcium was 9.5 ± 0.64 mg/dl, serum phosphorus 5.03 ± 1.02 mg/dl, calcium-phosphorus product 48 ± 11.8 mg/dl and alkaline