

Comparison of extra renal potassium disposal in hypertensive, diabetic and normal subjects Estudio comparativo del manejo extrarrenal de potasio en sujetos controles, pacientes hipertensos y diabéticos

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Background: Sodium and potassium ions are involved in the regulation of blood pressure and the genesis of hypertension. **Aim:** To assess internal potassium balance, as a measure of sodium pump activity, in subjects with essential hypertension and diabetic patients. **Patients and methods:** Eleven hypertensive subjects, 5 non-insulin-dependent diabetics and 16 age matched controls were studied. An acute oral load of 0.8 mEq/Kg body weight of KCl was administered and blood samples were drawn every 30 min thereafter, until 120 min, to measure plasma K⁺ levels. Urinary K⁺ excretion during this period was also measured. In eight hypertensive patients, the test was repeated after two week of supplementation with 60 mEq/day of KCl. The maximal increase in plasma potassium levels and the time required to achieve the maximum concentration was recorded. **Results:** All patients had normal serum creatinine levels. Mean fasting blood glucose of diabetic patients was 133 ± 15.1 mg/dl. No difference between