

RELATIONSHIP BETWEEN ARTERIAL BLOOD PRESSURE, CALCEMIA AND PTH IN POSTMENOPAUSAL PATIENTS WITH PRIMARY HYPERPARATHYROIDISM

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BACKGROUND: Hypercalcemia affects the circulatory system, and the prevalence of arterial hypertension is higher in patients with primary hyperparathyroidism (PHPT), especially in those with other risk factors such as postmenopausal status. The aim of this study was to evaluate the relationship between arterial blood pressure (ABP), both systolic and diastolic, and the main biochemical parameters in postmenopausal women with PHPT. **PATIENTS AND METHODS:** We retrospectively reviewed data regarding a series of 107 postmenopausal patients (median age 65 years, range 49-83 years) with confirmed PHPT. The ABP was measured using an automatic device, together with baseline serum calcium (2.86 ± 0.48 mmol/L), parathyroid hormone (PTH) (192.6 ± 109.6 ng/L), alkaline phosphatase (ALP) (98.7 ± 37.3 U/L), and creatinine (76.9 ± 13.1 micromol/L) levels. **RESULTS:** A significant correlation between serum calcium and both PTH ($R=0.46$, $p<0.01$) and ALP ($R=0.31$, $p=0.013$), and between systolic and diastolic ABP ($R=0.53$, $p<0.01$), was found. Systolic ABP significantly correlated with age ($R=0.47$, $p<0.01$), but no relationship was observed between ABP and the common variables of calcium metabolism, as shown in the Table below. **CONCLUSIONS:** In postmenopausal patients with PHPT, both systolic and diastolic ABP did not correlate with serum calcium and PTH levels. Hypercalcemia did not represent a risk factor in this selected group of women, and thus the causes of a higher prevalence of hypertension in patients with PHPT remain unclear.