

#1929 - relationship between fibroblast growth factor-23 and blood pressure and pulse pressure in hemodialysis patients: A multicenter study

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Body

Introduction: Hypertension seems to be a major problem in dialysis patients. FGF-23 appears to be a risk factor for mortality in patients with end-stage renal disease (ESRD). This study aims to investigate FGF-23 and its association with blood pressure and pulse pressure among hemodialysis patients.

Materials and Methods: This cross-sectional multicenter study was performed on 135 patients aged 18 years and over with ESRD treated with hemodialysis. Systolic and diastolic blood pressure of all patients was measured. FGF-23, Uric Acid, Na and K were measured using blood test and fasting. We used univariate and multivariate linear and non-linear regression. Data were analyzed by the Stata 12 software.

Results: The mean age of patients was 56.45 ± 13.64 years. 60% of patients were male. The mean and median FGF-23 in patients was 855.07 ± 43.33 and 762.6 (IQR=456.6-1430.3) pg/mL. After adjustment for age, sex, dialysis time, uric acid, Na, K and kt/V, FGF-23 had quadratic association with pulse pressure and each 10-unit (pg/mL) increase in FGF-23 was significantly associated with 0.50 mmHg decrease in min pulse pressure ($P=0.002$) and 0.42

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mmHg decrease in mean pulse pressure (P=0.009).

Conclusion:FGF23 had a significant association with dialysis vintage and a significant reverse association with min and mean pulse pressure.

Keywords:Fibroblast Growth Factor-23,Blood Pressure,Pulse Pressure,Hemodialysis Patients

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