CardioRenal Medicine

Original Paper

A Profile of Renal Function in Northern Cameroonians with Essential Hypertension

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Abstract

Background/Aim: The two-way cause and effect relationship existing between high blood pressure and kidney dysfunction is currently a well-documented phenomenon with patients in either category being almost equally predisposed to the other pathology. Our goal was to assess the renal function capacity of hypertensive patients in our setting. ***Methods:*** This cross-sectional descriptive study involved the determination of blood pressure levels and the collection of blood and urine samples for the measurement of renal function markers. Hypertensive patients who came for medical follow-up constituted the study participants, and were enrolled consecutively into the study from February to May 2015. Data analysis was performed using the SPSS 20.0 software, and significant differences were determined at $p < 0.05$. ***Results:*** The prevalence of elevated creatinine and urea levels were 35 and 27%. Eighty percent of the participants had a decreased glomerular filtration rate ($\leqslant$90 mL/min/1.73 m^3), with at least 36% recording less than 60 mL/min/1.73 m^3. Proteinuria and glucosuria were recorded in 15% and 8% of the participants, respectively. The mean diastolic pressure was observed to be significantly higher in participants with proteinuria ($p = 0.016$), and participants' weight directly correlated with systolic blood pressure ($p = 0.015$). Furthermore, the mean estimated glomerular filtration rate was relatively lower in participants >60 years compared to those <60 years ($p < 0.001$). ***Conclusion:*** Renal function is often perturbed in hypertensive patients, and good blood pressure control may reduce the progression of renal impairment. Thus, a systematic evaluation of renal function in addition to blood pressure control in hypertensive patients is indispensable towards effectively reducing the occurrence of renal events and preventing end-stage renal disease.

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