

Dedication

To the soul of my supervisor

Dr/Mohammed Abdalraheem

To those who gave me a lot

(My dear family)

To my lovely friends and colleagues

TO all I love and respect

Acknowledgements

Firstly all thanks to ALLAH favors.

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Abstract

This study is descriptive analytical cross sectional study, aimed to assess plasma urea and creatinine levels in Sudanese hypertensive patients. Blood samples were collected from sixty patients with hypertension(study group) and forty samples from healthy ,non hypertensive subjects (control group) from Aldosogi Specialized Hospital during the period from March (2014) to July (2014).Plasma levels of urea and creatinine were measured in each group.

Results showed that in hypertensive patients, the plasma urea mean level was (40 ± 13.4) and for creatinine (1.14 ± 0.28) which were significantly higher than non hypertensive. (p.value < 0.05).The study illustrated a moderately weak positive correlation between creatinine to the duration of the hypertension. ($r=0.58$,p.value 0.000) and a weak positive correlation for urea .($r=0.34$, $p=0.004$).

Renal function should regularly measured in hypertensive patients especially in those with prolonged period of the disease.

المستخلص

هذه الدراسة وصفية تحليلية مقطعية هدفت الى قياس مستوى اليوريا و الكرياتينين في بلازما الدم في مرضى ارتفاع ضغط الدم السودانيين. في هذه الدراسة تم جمع ستون عينة من مرضى يعانون من ارتفاع ضغط الدم و اربعون عينة سليمة (اصحاء ظاهريا) من مستشفى الدسوقي التخصصي خلال الفترة من شهر مارس (2014) الى يوليو (2014).تم قياس مستوى اليوريا و الكرياتينين في بلازما الدم لكل مجموعة.

اظهرت النتائج في مرضى ارتفاع ضغط الدم ان متوسط البولينا هو (13.4 ± 40) و الكرياتينين (1.14 ± 0.28) و هما احصائيا اعلى من المجموعة السليمة (القيمة المعنوية اقل من 0.05).كما اظهرت الدراسة وجود ارتباط وسطي موجب بين مستوى الكرياتينين في بلازما الدم و فترة المرض. (معامل بيرسون=0.58 والقيمة المعنوية=0.000). و ارتباط ضعيف موجب لليوريا (معامل بيرسون=0.34 و القيمة المعنوية=0.004) يجب قياس وظائف الكلى بانتظام في المرضى الذين يعانون من ارتفاع ضغط الدم و خصوصا المصابين بالمرض لفترة طويلة من الزمن.

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