

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

وَفِي أَنفُسِكُمْ أَفَلَا تُبْصِرُونَ

صدق الله العظيم

سورة الذاريات الآية 21

Dedication

This thesis is dedicated to my father, who taught me that the best kind of knowledge. It also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done step by step. Finally, this thesis is dedicated to all those who believe in the richness of learning.

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All praise and thanks to Allah the Almighty. Who blessed me with courage for preparation and completion of this study.

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Abstract

This analytical case control study was done during the period of March 2012 to July 2012 in Khartoum state military hospital to determine the PT, APTT among hypertensive patients seventy patients (70) and thirty (30) normal controls were studied. A structured questionnaire was prepared which included the general information and laboratory investigation and an informal consent was obtained.

Blood, plasma samples were collected from hypertensive patients and normal healthy control for use in laboratory investigation. The result shown non significant difference ($P= 0.22$) between the mean level of hypertensive patient (15.3 Sec) and control (15.5 Sec) in prothrombin time (PT), and there is non significant difference ($p= 0.20$) between the mean level of hypertensive patient (32.4 Sec) and control (33.4 Sec) in activated partial thromboplastin time (APPT).

The Result obtain indicated that measurement of prothrombin time (PT) and activated partial thromboplastin. (APTT) were unnecessary when evaluating a hypertensive patients in whom there was no clinical evidence of haemostatic abnormality an approach would eliminate the need for most of coagulation test done in these patients such as D.Dimar and Fibrinogen level.

ملخص الدراسة

أجريت هذه الدراسة التحليلية خلال الفترة من مارس 2012 الى يوليو 2012 في ولاية الخرطوم بمستشفى السلاح الطبي لتحديد زمن البروثرومبين و زمن الترومبوبلاستين الجزئي المنشط بين مرضى ارتفاع ضغط الدم. شملت الدراسة سبعين مريضاً (70) وثلاثين (30) من المعادلين الطبيعيين من الجنسين، تم جمع البيانات الخاصة بمرضى ارتفاع ضغط الدم والمعادلين الطبيعيين من خلال إستبيان تم إعداده يشتمل على معلومات عامة وعلى التحاليل المعملية.

تم جمع عينات الدم ، البلازما من كل المرضى والمعادلين الطبيعيين لإجراء الفحوصات المعملية. أظهرت النتائج عدم وجود فرق كبير بين المرضى والمعادلين الطبيعيين ($P = 0.22$) في متوسط زمن البروثرورومبين بين مرضى ارتفاع ضغط الدم (Sec 15.3) والمعادلين الطبيعيين (15.5 Sec) وأيضا لا يوجد فرق كبير بين مرضى ارتفاع ضغط الدم والمعادلين الطبيعيين ($P = 0.20$) في متوسط زمن الترومبوبلاستين الجزئي المنشط بين مرضى ارتفاع ضغط الدم (Sec 32.4) والمعادلين الطبيعيين (Sec 33.4)

أشارت النتائج المتحصل عليها أن قياس زمن البروثرورومبين وقياس زمن الترومبوبلاستين الجزئي المنشط غير ضرورية عند تقسيم مرضى ارتفاع ضغط الدم عندما لا يوجد أي دليل سريري يشير لاى وجود أي خلل في عملية الإرقاء ، فمثل هذا النهج من شأنه أن يلغى الحاجة الي أكثر من ذلك في إختبارات تخثر هؤلاء المرضى مثل D. Dimer ومستوى الفيبرينوجين.

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Abbreviations

ACE	Angiotensin – converting enzyme
ACT	Activating clotting time
ADP	Adenine diphosphate
APTT	Activated partial thromboplastin time
ATP	Adenine triple phosphate
CA ⁺²	Calcium ions
CBC	complete blood count
CSF	Colony stimulating factor
DIC	Disseminated intravascular coagulation
F	Fragment
FDPs	Fibrin degradation products
FL	Femtoliter
GP	Glycoprotein
HMWK	High molecular Wight kinogenin
JNC₇	Joint national committee of prevention , detection , evaluation and treatment of high blood pressure
Mm	Millimetre
mm Hg	Millimetre of mercury
PA/s	Plasminogen activation inhibitor
PF3	Platelet factor 3
PLG	Plasminogen
PPP	Platelet poor plasma
PT	Prothrombin time
R.E.S	Reticuoendothelial system
SPSS	Statistic package for social science program
TT	Thrombin time
TXA₋₂	Thromboxan A₂
VIII:C	Coagulation factor Eight
VWF	Vonwillbrand factor
VWF :Ag	Vonwillbrand factor antigen

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