يَسْمَعُ اللَّهُ الرَّحْمَنُ الرَّحِيمُ

قال الله تعالى

وَفِي أَنفُسِكُمْ أَفَلَا تَبْصِرُونَ

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 one step at a time. Finally, this thesis is dedicated to all those who believe in the richness of learning.
Acknowledgment

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

First and for most, I have to thank May parents for their love and support throughout my life. Thank you both for giving me strength to reach for the stars and chose my dream. My bother, aunties and cousins desire who my hertel thanks as well.

I must express my gratitude to words my supervisor, Dr. Tagwa Yousif Al-Sayed. How leadership, support, attention, to detail and hard are highly appreciated.

I would like to thank Colonel: Yasser Abdeen for giving me the opportunity to work at Military Hospital Lab.

I would like to thank the group at the internal medicine department at military hospital. Also I would like to thank Alham derar for statistical help.

Last, but not last I would like to thank all my friend, thank you for your understanding and encouragement in my many, many moment of crisis, your friendship makes may life a wonderful experience. I cannot list the entire name here but you are always on my mind.

Haifa
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

أجرت هذه الدراسة التحليلية خلال الفترة من مارس 2012 إلى يوليو 2012 في ولاية الخرطوم بمستشفى السلاح الطبي لتحديد زمن البروترومبين و زمن الثروموبلاستين الجزئي المنطقت بين مرضى ارتفاع ضغط الدم. شملت الدراسة سبعين مريضاً (70) وثلاثين (30) من المعادلين الطبيعيين من الجنسين. تم جمع البيانات الخاصة بمريضي ارتفاع ضغط الدم والمعادلين الطبيعيين من خلال إستبان 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 في متوسط زمن البروترومبين المرامي والمعادلين الطبيعيين (0.22) بين مرضى ارتفاع ضغط الدم (15.3 Sec) والمعادلين الطبيعيين (15.5 Sec) وأيضاً لا يوجد فرق كبير بين مرضى ارتفاع ضغط الدم والمعادلين الطبيعيين (0.20) في متوسط زمن الثروموبلاستين الجزئي المنطقت بين مرضى ارتفاع ضغط الدم (32.4 Sec) والمعادلين الطبيعيين (33.4 Sec).

أشارت النتائج المتحصل عليها أن قياس زمن البروترومبين وقياس زمن الثروموبلاستين الجزئي المنطقت غير ضرورية عند تقسيم مرضى ارتفاع ضغط الدم عندما لا يوجد أي دليل بيري يشير لاي وجود أي خلل في عملية الارتفاء، فمثل هذا النهج من شأنه أن يلغي الحاجة التي أكثر ومستوي D. Dimer Dimer الفيبرينوجين.
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### Abbreviations

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<td>ACE</td>
<td>Angiotensin – converting enzyme</td>
</tr>
<tr>
<td>ACT</td>
<td>Activating clotting time</td>
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<tr>
<td>ADP</td>
<td>Adenine diphosphate</td>
</tr>
<tr>
<td>APTT</td>
<td>Activated partial thromboplastin time</td>
</tr>
<tr>
<td>ATP</td>
<td>Adenine triple phosphate</td>
</tr>
<tr>
<td>CA(^{2+})</td>
<td>Calcium ions</td>
</tr>
<tr>
<td>CBC</td>
<td>Complete blood count</td>
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<tr>
<td>CSF</td>
<td>Colony stimulating factor</td>
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<td>DIC</td>
<td>Disseminated intravascular coagulation</td>
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<td>F</td>
<td>Fragment</td>
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<td>FDPs</td>
<td>Fibrin degradation products</td>
</tr>
<tr>
<td>FL</td>
<td>Femtoliter</td>
</tr>
<tr>
<td>GP</td>
<td>Glycoprotein</td>
</tr>
<tr>
<td>HMWK</td>
<td>High molecular weight kinogenin</td>
</tr>
<tr>
<td>JNC(_{7})</td>
<td>Joint national committee of prevention, detection, evaluation and treatment of high blood pressure</td>
</tr>
<tr>
<td>Mm</td>
<td>Millimetre</td>
</tr>
<tr>
<td>mm Hg</td>
<td>Millimetre of mercury</td>
</tr>
<tr>
<td>PA/s</td>
<td>Plasminogen activation inhibitor</td>
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<td>PF3</td>
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<td>PLG</td>
<td>Plasminogen</td>
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<td>R.E.S</td>
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