

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

وَاللَّهُ خَلَقَكُم مِّنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ جَعَلَكُمْ أَرْوَاحًا وَمَا تَحْمِلُ مِنْ أَثْنَى وَلَا تَصْنَعُ إِلَّا يَعْلَمُهُ وَمَا يُعَمَّرُ مِنْ مُعَمَّرٍ وَلَا يُنْقَصُ مِنْ عُمُرِهِ إِلَّا فِي كِتَابٍ إِنَّ ذَلِكَ عَلَى اللَّهِ يَسِيرٌ (11)

صدق الله العظيم

سورة فاطر الآية 11

# **Dedication**

**To all mothers and their newborns.**

**To my father, mother  
and all family  
members.**

# **Acknowledgement**

I'm grateful to my supervisor **Dr. MAHMOUD MOHAMED ELGARI**, Assistant professor of Hematology and Immunohematology, College of Medical Laboratory Science, Sudan University of Science and Technology, who has helped me so much to set and complete this research and to format it in this way. I can't adequately acknowledge his hard work. Without his supervision this thesis could never have been completed.

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## **Abstract**

This is a cross sectional analytical study conducted in Omdurman maternity hospital during period march 2012 to June 2012; the study was included 50 pregnant women with pre-eclampsia were selected randomly with age ranged between (18-37) years.

25 healthy pregnant women of the same age range enrolled as control group. Every female interviewed through especial questionnaire to collect historical data, citrate blood sample was collected from each pre-eclampsic pregnant woman, and citrated poor plasma was immediately harvested and analyzed, using automated coagulometer for prothrombin time ( PT ), activated partial thromboplastin time ( APTT), and fibrinogen level.

The mean of PT values of the study group was (13 sec) and the controls was (13 sec), the mean of APTT value study group was (51 sec) and the controls was (30 sec), the mean of fibrinogen level of the study group was (476mg/dl) and the controls was (296mg/dl).

The study results revealed that there was insignificant value for prothrombin time of pre-eclampsic women (P value >0.05) whoever high with significant increased in activated partial thromboplastin time and fibrinogen level of pre-eclampsic women compared to normal control mean level (p.value < 0.000).

## الكلمات المفتاحية

هذه دراسه تحليليه وصفيه اجريت في مستشفى امدرمان للولاده في الفتره من (مارس-يونيو 2012 ) تمثلت الدراسه في عدد خمسون عينه من النساء الحوامل المصابات بارتفاع ضغط الجنين اختيارت عشوائيا في الفتره العمريه 18-37 سنه. شملت الدراسه عدد 25 من النساء الحوامل غير المصابات بضغط الجنين في نفس الفئه العمريه كعينه ضابطه, تم اعطاء النساء استبيان لجمع المعلومات و جمع عينات دم في حاويات تحتوي علي نترات الصوديوم, تم فصل البلازما مباشره لاجراء زمن البروثرومبين و زمن الثرومبوبلاستين المنشط وقياس مستوى الفيبرينوجين. وجد ان متوسط البروثرومبين في عينات الدراسه كان 13 ثانيه وفي العينه الضابطه كان 13 ثانيه, و متوسط الثرومبوبلاستين المنشط في عينات الدراسه كان 51 ثانيه بينما في العينه الضابطه كان 30 ثانيه, و وجد متوسط الفيبرينوجين في عينات الدراسه كان

476 ملجرام/ديسي لتر وفي العينه الصابطه كان

296 ملجرام/ديسي لتر

وخلصت الدراسه انه لا يوجد زياده في الدرجه المعنويه في زمن البروثرومبين في النساء المصابات بارتفاع ضغط الجنين (الدرجه المعنويه  $< 0.00$ ), بينما يوجد تغير حقيقي في زمن الثرومبوبلاستين المنشط ومستوي الفيبرينوجين في النساء المصابات بارتفاع ضغط الجنين بالمقارنة مع (متوسط العينات الصابطه (الدرجه المعنويه  $> 0.00$ )

## **Abbreviations**

<b>APTT</b>	Activated Partial Thromboplastin Time
<b>BP</b>	Blood Pressure
<b>CESDI</b>	Confidential Enquiry into Stillbirths and Deaths in Infancy.
<b>DIC</b>	Disseminated Intravascular Coagulopathy
<b>HELLP</b>	Hemolysis Elevated Liver enzyme, Low Platelet
<b>HMWK</b>	High Molecular Weight Kininogen
<b>KCCT</b>	Kaolin Cephalin Clotting Time
<b>PAI 1</b>	Plasminogen Activator Inhibitor 1
<b>PF3</b>	Platelet Factor
<b>PT</b>	Prothrombin Time
<b>PTTK</b>	Partial Thromboplastin Time with Kaolin
<b>PIGF</b>	Placental Growth Factor
<b>SFlt-1</b>	Soluble Fms-like tyrosine Kinase 1
<b>sEng</b>	Solubl Endoglin
<b>TAFI</b>	Thrombin-Activatable Fibrinolysis Inhibitor
<b>T-PA</b>	Tissue Plasminogen Activator
<b>vWF</b>	Von Will brand Factor
<b>VEGF</b>	Vascular Endothelial Growth Factor
<b>OCS</b>	Open Canalicular System

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