

الآية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

لِلَّهِ مُلْكُ السَّمَوَاتِ وَالْأَرْضِ يَخْلُقُ مَا يَشَاءُ يَهَبُ لِمَنْ
يَشَاءُ إِنَاءً وَيَهَبُ لِمَنْ يَشَاءُ الذُّكُورَ (49) أَوْ يُرَوِّجُهُمْ
ذُكْرَانًا وَإِنَاءً وَيَجْعَلُ مَنْ يَشَاءُ عَقِيمًا إِنَّهُ عَلِيمٌ قَدِيرٌ
(50))

صدق الله العظيم

سورة الشورى الآيات 49-50

Dedication

To my parents

To all members of my family

To my teachers, friends and colleagues

Acknowledgement

The greatest thanks first for Alla, firstly most grateful to my supervisor Dr, **Tagwa Yousif El sayed** for her expertise support , valuable advice and endless efforts to make this work come to into really.

I would like to thank the staff of hematology department in Sudan University of science and technology for their valuable assistance and encouragement throughout the research.

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To all of them very thanks with regards

Noor

Abstract

In spite of various side effects and serious complications associated with the use of combined oral contraceptive pills, it regarded as a safe and highly effective method of contraception.

In recent years, the usage of combined oral contraceptive pills with low oestrogen content or without oestrogen are being recommended to minimize the side effects.

This analytical case control study was conducted in Khartoum state during the period from June to August 2013. This work aimed to measure some coagulation parameters PT, APTT and fibrinogen level in women using of oral contraceptive pills and implanon. Fifty women were selected as volunteers and considered as case group and other 20 women who didn't use the contraceptive pills or not used implanon were selected as control group.

Two ml of venous blood was collected in 0.5ml of 3.8% trisodium citrate containers and investigated for PT, APPT and fibrinogen level by used of coagulameter (clot), the result were analyzed by SPSS. The result revealed that the mean of PT 12.6 seconds, APTT 29.9 seconds and fibrinogen level 261 mg/dL in women using contraceptive pills and the mean of PT 12.9 seconds , APTT 29.9 seconds and fibrinogen level 241 mg/dL in women using implanon.

In conclusion the result showed significant decrease of fibrinogen level in women using implanon when compared with control group (P value <0.05). and no significant differences were noticed in PT, APTT and fibrinogen in women used contraceptive pills.

ملخص البحث

توجد عدة آثار جانبية لإستخدام العقاقير المانعة للحمل منها تخثر الدم نتيجة لوجود هرمون الاستروجين.

هذه دراسة تحليلية بين الحالة والمعيار تم إجراؤها في الفترة ما بين شهر يونيو الي اغسطس 2013م بولاية الخرطوم لقياس بعض عوامل تخثر الدم عند النساء اللاتي يتناولن منظّمات حمل فموية او الشريحة المانعة للحمل.

اخذت خمسين عينة دم من نساء يتناولن منظّم الحمل الفموية او يستخدمن الشريحة المانعة للحمل بعد اخطارهن بهذه الدراسة واهميتها وعوملن كعينات اختبارية ، و 20 عينة دم من نساء لم يستخدمن هذه العقاقير والشريحة المانعة للحمل وفقاً لنظام الاختيار المحدد وعوملن كعينات ضابطة.

تم اخذ 2 مل من الدم من كل مشاركة في الدراسة في حاوية تحتوي علي 0.5 سترات الصوديوم الثلاثية.

ثم استخدم جهاز تخثر الدم لتحليل زمن البروثرومبين وزمن الترمبوبلاستين الجزئي المنشط وقياس مستوي الفيربرينوجين.

كل النساء اللواتي يستخدمن مانع الحمل الفموي كان لهم القيم المتوسطة الاتية: زمن البروثرومبين 12.6 ثانية، زمن الترمبوبلاستين المنشط الجزئي 29.9 ثانية ، ومستوي الفيربرينوجين 261 ملجم/ ديسلتر.

كل النساء اللاتي استخدمن الشريحة المانعة للحمل كان لهم القيم المتوسطة الاتية: زمن البروثرومبين 12.9 ثانية، زمن الترمبوبلاستين المنشط الجزئي 29.9 ثانية ، ومستوي الفيربرينوجين 241 ملجم/ ديسلتر.

بصورة عامة اظهرت الدراسة نقصاناً ذو دلالة معنوية في مستوي الفيربرينوجين في العينات الاختبارية المستخدمة للشريحة المانعة للحمل ومقارنتها بالعينات الضابطة، بينما لم تكن هنالك فروقاً معنوية في زمن البروثرومبين وزمن الترمبوبلاستين المنشط الجزئي ومستوي الفيربرينوجين عند العينات في العينات الاختبارية المستخدمة لمنظّمات الحمل الفموية.

Contents

Subject		Page No
الآية		I
Dedication		II
Acknowledgement		III
Abstract		IV
ملخص البحث		V
Contents		VI
List of tables		XI
List of figures		XII
Abbreviations		XIII
Chapter one: Introduction and literature review		
1.1	General introduction	1
1.1.1	Homeostasis	1
1.1.1.1	Components of primary haemostasis	2
1.1.1.1.1	The vascular system	2
1.1.1.1.2	Platelets	4
1.1.1.2	Components of secondary haemostasis	7
1.1.1.2.1	The coagulation factor groups	8
1.1.1.2.1.1	Contact group	8
1.1.1.2.1.2	Prothrombin (Vitamin K-Dependent) group	8

1.1.1.2.1 .3	Fibrinogen group	9
1.1.1.2.2	Coagulation cascade	9
1.1.1.2.2 .1	Intrinsic pathway	10
1.1.1.2.2 .2	Extrinsic pathway	10
1.1.1.2.2 .3	Common pathway	10
1.1.1.2.3	Coagulation factor inhibitors	11
1.1.1.2.3 .1	Blood flow and hepatic degradation of clotting factors	11
1.1.1.2.3 .2	Antithrombin	11
1.1.1.2.3 .3	Tissue factor pathway inhibitor(tFPI)	12
1.1.1.2.3 .4	Protein C and protein S	12
1.1.1.3	Fibrinolysis	14
1.1.1.4	Laboratory tests of coagulation cascades	14
1.1.1.4.1	Prothrombin Time	15
1.1.1.4.2	Activated Partial Thromboplastin Time	16
1.1.1.4.3	Measurement of Fibrinogen Concentration	16
1.1.1.4.4	Thrombin Time	16
1.1.2	Types of contraceptives	17
1.1.2.1	Birth control pills	17
1.1.2.1.1	Combined birth control Pills	18
1.1.2.1.2	progestin-only pills	18
1.1.2.2	Contraceptive implants	19
1.1.2.3	A cervical cap	19

1.1.2.4	The male condoms	19
1.1.2.5	Contraceptive film	20
1.1.2.6	Contraceptive foam	20
1.1.2.7	Contraceptive sponge	20
1.1.2.8	Contraceptive suppositories	20
1.1.2.9	Diaphragm	20
1.1.2.10	Emergency contraception	20
1.1.2.11	The female condom	21
1.1.2.12	Fertility awareness method	21
1.1.2.13	Injectable contraceptives	21
1.1.2.14	Intrauterine contraception	21
1.1.2.15	The patch	21
1.1.2.16	The ring	22
1.1.2.17	The shield	22
1.2	Previous studies	23
1.3	Rationale	24
1.4	Objectives	25
1.4.1	General objective	25
1.4.2	Specific objectives	25
Chapter two: Materials and Methods		
2.1	Study design	26
2.2	Study population	26
2.2.1	Inclusion criteria	26
2.2.2	Exclusion criteria	26

2.3	Sample size	26
2.4	Data collection	26
2.5	Sampling	27
2.6	Methodology	27
2.6.1	The coagulometer	27
2.6.1.1	Principle	27
2.6.2	Prothrombin Time	27
2.6.2.1	Principle	27
2.6.2.2	Reagents	28
2.6.2.3	Method	28
2.6.2.4	Expression of results	28
2.6.2.5	Normal values	28
2.6.3	Activated Partial Thromboplastin Time	28
2.6.3.1	Principle	29
2.6.3.2	Reagents	29
2.6.3.3	Method	29
2.6.3.4	Expression of results	30
2.6.3.5	Normal range	30
2.6.4	Measurement of fibrinogen level (claus technique)	30
2.6.4.1	Principle	30
2.6.4.2	Reagent	30
2.6.4.3	Procedure for fibrinogen	30
2.6.4.4	Normal range	31
2.7	Ethical consideration	31

2.8	Data analysis	31
Chapter three : Results		
	Results	32
Chapter four : Discussion , Conclusion and Recommendation		
	Discussion	37
	Conclusion	40
	Recommendations	41
	References	42
	Appendices	44

List of Tables

Table	Title	Page
1.1	Some contents of platelet granules	5
1.2	Key proteins involved in the haemostatic network.	13
3.1	The mean of PT, APTT and fibrinogen level among case and control group:	34
3.2	The mean of PT, APTT and fibrinogen level among women used implanon and contraceptive pills	35
3.3	The mean of PT, APTT and fibrinogen level in different age groups among women used Implanon and contraceptive pills	36
3.4	The mean of PT, APTT and fibrinogen level in different duration groups among women used Implanon and contraceptive pills	37

List of Figure

Figure	Title	Page
1.1	Classical coagulation cascades	11
3.1	Frequency of cases and control groups	33

Abbreviations

ADP	Adenosine diphosphate
ADPase	Adenosine diphosphatase
AT	Anti thrombin
AT III	Anti thrombin III
CaCl₂	Calcium chloride
C4b	Complement 4b
cAMP	Cyclic adenosine mono phosphate
CD	Cluster designation
DIC	Disseminated intravascular coagulation
EC	Emergency contraception
FDPs	Fibrinogen/fibrin degradation products
FSH	Follicle stimulating hormones
GDP	Guanosine diphosphate
GP	Glycoproteins
GTP	Guanosine triphosphate
HIV	Human immune deficiency virus
HMWK	High molecular weight kininogen
INR	International normalized ratio
ISI	International sensitivity index
IUD	Intra uterine device
LNG-IUD	Levonorgestrel intra uterine device
LH	Luteinizing hormone
NO	Nitric oxide
PAI-1	Plasmin-plasminogen activator inhibitor 1
PC	Protein C
PDGF	Platelet-derived growth factor
PF3	Platelet phospholipids
PF4	Platelet factor 4
PID	Pelvic inflammatory disease
PLA2	Phospholipase enzymes
PMS	Premenstrual syndrome
PT	Prothrombin Time
PTT	Partial thromboplastin time
SD	Stander Deviation
SPSS	Statistical package of social science
STIs	Sexually transmitted infections
TFPI	Tissue factor pathway inhibitor

tPA	Tissue plasminogen activator
TT	Thrombin time
TXA₂	ThromboxaneA ₂
TXB₂	Thromboxane B ₂
Upa	Urokinase plasminogen activator
vWF	Von willebrand factor