

الآية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى

وَقُلْ رَبِّ أَدْخِلْنِي مُدْخَلَ صِدْقٍ وَأَخْرِجْنِي مُخْرَجَ صِدْقٍ وَاجْعَلْ لِي مِنْ لَدُنْكَ سُلْطَانًا نَصِيرًا

صدق الله العظيم

سورة الإسراء الآية 80

DEDICATION

To my father and my mother

To my brothers and sisters.

To my friends

To my big extended family

ACKNOWLEDGEMENTS

Thanks to Allah first for giving me strength and patience to achieve this research

Thank for Dr .Mansor Mohammed Mansor for all the support and tolerance he showed with everyone

I would like to thanks my father and my mother for helping me

.Thanks for teaching staff in Hematology and Immunology Department for help me how hematology can change the way we look to the world.

Thanks for Omdurman pediatric hospital (staff for all the help us

Thanks for Hematology department for support and helping me.

Thanks for everybody help me in this research

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List of abbreviation

ADP	Adenosine diphosphate
APTT	Activate partial thromboplastin time
ATP	Adenosine triphosphate
CAMP	Cyclic adenosine monophosphate
CBC	Complete blood cell count
CFU.L	Colony forming unit lymphocyte
CFUE	Colony forming unit erythrocyte
COPD	Chronic obstructive pulmonary disease
ETS	Environmental tobacco smoking
HMWK	High molecular weight kinin
MCV	Mean cell volume
PA-1	Plasminogen activator
PT	Prothrombin time
PDGF	Platelet derived growth factor
RBC	Red blood cell
SHS	Second hand smoking
SHS	Second hand smoking

	Termed pluripotential stem cell
TF	Tissue factor
TFPI	Tissue factor plasminogen inhibitor
VWF	Von will brand factor
WBC	White blood cells

مستخلص البحث

هذه دراسه وصفيه تحليليه تم اجراؤها في الفترة ما بين الاول مارس 2012 حتى اغسطس 2012 في مستشفى حوادث امدرمان قياس نسبة كريات الدم الحمراء, البيضاء, الصفائح الدمويه, الخضاب, معدل البروثرومبين و معدل الثرميوبلاستين الجزئي النشط عند المدخنين .

اخزت 45 عينه من المدخنين ومقارنا مع 30 عينه من غير المدخنين بعد اخطارهم بهذه الدراسه واهميتها وبعد موافقتهم علي المشاركة. صنف المدخنين حسب العمر ثم و نمط الي ثلاثه مجموعات وفق مراحل التدخين المختلف 1-10سنة, 11-20 سنة, 21-29سنة, تم اخز 5مل من الدم من كل مشارك في هذه الدراسه وقسمت الي 2.5مل في حاويات تحتوي علي مانع تجلط (EDTA)) و 2.5مل في حاويات تحتوي علي سترات الصوديوم الثلاثيه.

تم استخدام جهاز SYSMEX لتحليل اعداد الدم كامل ((CBC) الدم يعمل اتوماتكيا وتم تحليل البروثرومبين (PT) و الثرميوبلاستين الجزئي بالطريقه اليدويه.

وجدت معدلات الفحوصات في المدخنين. كريات الدم الحمراء 5.2×10^6 ل, كريات الدم البيضاء 6.4×10^9 ل, الصفائح الدمويه 241×10^9 ل, النسبه الدم 15.1 كج ل, البروثرومبين 14.4= ثانيه, الثرميوبلاستين= 25.6 ثانيه

اظهرت نتائج كريات الدم الحمراء والخضاب ذو دلالة احصائيه في المدخنين مقارنه مع غير مدخنين واما الصفائح الدمويه و الثرميوبلاستين نقصان بسيط احصائيا في المدخنين مقارنه مع غير مدخنين فقد اظهرت النتائج كريات الدم البيضاء والبروثرومبين في معدل الطبيعي.

ABSTRACT

This was Descriptive cross sectional study and analytical study conducted at Omdurman Hospital during the period March to August 2012. The aim of this study is to estimate complete blood cell count (CBC), prothrombin time (PT) and activate partial thromboplastin time (PTT) in Sudanese cigarette smokers.

45 samples from cigarette smokers and 30 health individual non-smokers were withdrawn and participants were informed about the study and agreed for participation. The study population was divided into three groups according to duration of smoking. Venous blood of 5ml was bleed (2.5ml in EDTA containers and 2.5ml in trisodium citrate container and investigated for the count of erythrocyte, white blood cell (WBC) and hemoglobin in full automated hematology analyzer (Sysmex) was used for the (CBC) analysis and manual analysis for prothrombin time(PT) and partial thromboplastine time(PTT).

All cigarette smokers had mean values of hemoglobin (Hb) of 15.1 \pm 1.5g/dl), total white blood cell of 6.4×10^9 /L, erythrocyte RBC of 5.2 million/ mm³), prothrombitime (PT) of 14.4 second and partial thromboplastine (PTT) of 25.6 second platelets 241×10^9 /L. The results of this study concluded that erythrocyte count and Hb were significantly increased in smokers ($p < 0.000$) but platelets and partial thromboplastin time were significantly decreased in smokers ($p < 0.05$). The result also indicated that total white blood cell (WBC) and prothrombin time (PT) were normal in smokers. Packet cell velum PCV and mean cell hemoglobin were significantly increase ($p < 0.000$) in smokers