الآيـة

قال تعالي:

بسم الله الرحمن الرحيم

(قُلْ لَوْ كَانَ الْبَحْرُ مِدَادا لِكَلِمَاتِ رَبِي لَنَفِدَ البَحْرُ قَبْلَ انْ تَنْفَدَ كَلِمَاتُ رَبِي لَنَفِدَ البَحْرُ قَبْلَ انْ تَنْفَدَ كَلِمَاتُ رَبِي وَلَوْ جِئْناً بِمِثْلِهِ مَدَدا)

صدق الله العظيم سورة الكهف الاية (109)

Dedication

To soul my father and To my mother

For giving me the hope for life, for love and those give me power supply to all my life.

To my brothers and sisters to my husband

For giving me the chance for choice my live and support me by anything to my study, job, give me hope to tomorrow and future.

To my teachers

For showing me the excitement and joy of hematology.

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Abstract

Ischemic Heart diseases are major health problem and greatly affecting the economic and social status of such patients. The objective of this study to measure of platelets count and platelet indices among ischemic heart disease patients compared to control, and compared between ischemic heart disease patients them self according to age and gender to observe change which can occur.

The study was carried out at the Alshaab hospital teaching at Khartoum state. One hundred blood samples were collected, from 70 ischemic heart disease patients (40 male and 30 post monoposal female) matched by 30 health persons as control (20 male and 10 post monoposal female). The samples were tested for platelets count, platelet indices by sysmex21 Automated Hematology Analyzer. SPSS (version16) was used for statistical analysis.

The results showed higher significant values of PMV,PDW, PLCR in patients compared with control.

The mean of PMV in the patients was $(10.08\pm1.3 \text{ fl})$ and that of control was $(9.4\pm.5 \text{ fl})$.

The mean of PDW in the patients was $(13.1\pm2.6 \text{ fl})$ and that of control was $(11.4\pm1.3 \text{ fl})$.

The mean of PLCR in the patients was $(26.8\pm7.8 \%)$ and that of control was $(20.7\pm4.8 \%)$. (P value <0.05).

Also no significance change occur in the mean of platelets count in ischemic heart disease patients compared to control (P value >0.05).

Also no significance change occur in PMV, PDW, PLCR and platelets count in patients them self according to Gender and different age groups with (P value >0.05).

Therefore its recommended that the patients must be screened always to avoid the complications of thrombosis that cause heart attack and sudden death.

الخلاصه

امراض نقص الترويه القلبيه مشكله صحيه كبيره لها تاثير كبير على الحاله الاجتماعيه والاقتصادية.

الهدف من هذه الدراسه هو ايجاد تعداد الصفائح الدمويه ومؤشرات الصفائح الدمويه لدى امراض نقص الترويه القلبيه ومقارنتها مع مجموعة الاصحاء وايضا مقارنتها مع المرضى انفسهم حسب العمر والنوع لمقارنة التغير الذي يمكن ان يحدث.

اجريت هذه الدراسه بمستشفى الشعب التعليمي بولاية الخرطوم السودان.

جمعت 100 عينة من الدم 70 عينة منها كانت من مرضى نقص الترويه القلبيه (40 عينة من الرجال و30 عينة من النساء في سن الياس) و30 عينة من مجموعة الاصحاء (20 عينة من الرجال و10 عينات من النساء), تم تحليل هذه العينات لايجاد الصفائح الدمويه ومؤشرات الصفائح الدمويه بواسطة استخدام محلل الدم الاتوماتيكي سسمكس 21.

تم تحليل البيانات بواسطة برنامج الحزم الاحصائيه الاجتماعيه (16) للتحليل الاحصائي.

اظهرت النتائج زياده احصائيه في قيم مؤشرات الصفائح الدمويه لدى المرضى مقارنة بالاصحاء.

متوسط PMV لدى المرضى كان ($10.08\pm1.3~\mathrm{fl}$) بينما لدى المجموعه الضابطه كان ($9.4\pm.5~\mathrm{fl}$)

ومتوسط PDW لدى المرضى كان ($13.1\pm2.6~\mathrm{fl}$) وفي المجموعه الضابطه كان ($11.4\pm1.3\mathrm{fl}$)

متوسط PLCR لدى المرضى كان (2.6 ± 2.6) وفي المجموعه الضابطه كان 4.8 ± 2.0) متوسط PLCR معنوية اقل من $(0.05 \pm 2.6$).

بينما اظهرت الدراسه انه ليس هنالك تغيير ملحوظ في متوسط عدد الصفائح الدمويه لدى المرضى مقارنة بالاصحاء (بدرجة معنوية اكبر من 0.05).

ايضا لايوجد تغير ملحوظ في متوسط تعداد ومؤشرات الصفائح الدمويه لدى المرضى انفسهم بدلالة النوع والفئات العمرية المختلفة (بدرجة معنوية اكبر من 0.05).

نوصىي بان يتم اختبار المرضى دائما وذلك لتجنب مضاعفات النوبة القلبية والموت المفاجئ.

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Abbreviations

Abbreviation	Full text
BT :	Bleeding time
DIC:	Disseminated intravascular coagulation
EDTA:	Ethylene di adenine tetra acetic acid
HB :	Hemoglobin
HiCN:	Cynomethemoglobin
IE:	Infective endocarditis
MI :	Myocardial infraction
PLTS:	Platelets
RHD:	Rheumatic Heart Disease
RBCS:	Red blood cells
TXA2:	Thromboxane
VWF:	Von will brand factor
WBCs:	White blood cells
AA:	Arachidonic acid
ADP:	Adenosine diphosphate
CAD:	Cardiovascular disease
MI:	Myocardial infarction
MPI:	Mean platelets indices
MPV:	Mean platelets volume

PCT: Platelet crit

PRP: platelets rich plasma

PLCR: Platelet large cell ratio

TPO: Thrombopoietin

ITP: Immune thrombocytopenia

CAD: Coronary artery disease

ACS: Acute coronary syndrome