الآيــة

قال تعالى:

فَبَدَأَ بِأَوْعِيَتِهِمْ قَبْلَ وِعاءِ أَخِيهِ ثُمَّ اسْتَخْرَجَها مِنْ وِعاءِ أَخِيهِ كَذلِكَ كِدْنا لِيُوسُفَ ما كانَ لِيَأْخُذَ أَخاهُ فِي دِينِ الْمَلِكِ إِلَّا أَنْ يَشاءَ اللَّهُ نَرْفَعُ دَرَجاتٍ مَنْ نَشاءُ وَفَوْقَ كُلِّ ذِي عِلْمٍ عَلِيمٌ

سورة يوسف الآية (76)

Dedication

I dedicate this research with much love:

To ..

My mother.

To ..

My father who supported me by all means

.

To ..

My friends and my teachers.

To ..

All whom I love and respect.

Acknowledgment

I would to thank Allah who guided my steps in this study. Im deeply indebted to my supervisor:

Dr. Khalda Mirghani Hamza

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For all above I would convey my thanks & appreciation**.**

Abstract

This study was a hospitalized cross sectional study conducted at Alnaw Teaching Hospital. During the period from March 2011 to may 2011. Fifty chronic renal failure patients under haemodialysis were selected for this study to evaluate the hematological parameters. Patients were informed about the study, expected direct outcomes and agreement of participants was obtained. Direct interview was used to collect information about patient's age, sex and associated diseases. Fifty Blood samples were taken from patients pre and post haemodialysis in ethylene diamine tetra acetic acid anti coagulated test tubes, Hb, PCV, RBCs, WBCs and PLT count were measured ,red cell indices were determined. The results showed a significant decrease in the concentration of Hb, PCV, RBC, PLT, TWBC (p.value <0.05) but there was insignificant increase in MCV and in significant decrease in MCH, MCHC When compared with control. Hb, PCV, RBCs, and PLT were significant decrease pre and post dialysis of the same patient (P value < 0.05) except in TWBC was insignificant decrease (P value > 0.05).

اجريت هذه الدراسه التحليليه المقطعيه في الفتره من مارس وحتى مايو 2011 لقياس المعايير الدمويه لدى المرضى. تم اختيارالمرضى االمصابين بمرض الفشل الكلوي المزمن والخاضعين للغسيل الدموي في مستشفى النو التعليمي .خمسون مريضا اعلموا حول هذه الدراسه وتم الحصول على موافقة المشاركين لهذه الدراسه .تم جمع المعلومات من المرضى من عمر وجنس وامراض اخرى.اخذت عينات الدم من المرضى قبل وبعد الغسيل الدموي في لقياس تركيز خضاب الخلايا ,الحجم الفعلي للخلايا,تعداد كريات الدم الحمراء, تعداد كريات الدم البيضاء,الصفائح الدمويه,متوسط حجم الخلايا, متوسط نسبة الخضاب في الخلايا, متوسط تركيز الخضاب بالخليه الواحده. عند مقارنة المعايير قبل وبعد الغسيل الدموي مع مجموعة الضبط وجدت النتائج ان هنلك انخفاض ذو دلاله احصائيه في تركيز خضاب الخلايا, الحجم المتوسط للخلايا ,تعداد كريات الدم الحمراء, والصفائح الدمويه,كريات الدم البيضاء. ولكن هنلك زياده وليس ذو دلاله احصائيه في متوسط حجم الخليه .جميع النتائج كانت ذات دلاله احصائيه (واقل من 0,05) . عند مقارنة المعاييروالصفائح الدمويه وخلايا الدم البيضاء قبل وبعد الغسيل الدموي في نفس المريض وجدت النتائج ان هنلك انخفاض ذو دلاله احصائيه(واقل من 0,05) فيما عدا كريات الدم البيضاء لم تكن ذات دلاله احصائيه(واكبر من 0,05)

List of Abbreviations

ARF: Acute renal failure

CRF: Chronic renal failure

CBC: Complete blood count

CKD: Chronic kidney disease

EDTA: Ethylene diamene tetra acetic acid

e GFR: Estimated glomerular filtration rate

fl : femtoliter

Hb: Hemoglobin

MCV: Mean cell volume

MCH: Mean cell hemoglobin

MCHC: Mean cell hemoglobin concentration

PCV: Packed cell volume

Pg: Picogram

PLT: Platelets

RBCs: Red blood cells

WBCs: White blood cells.

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