NEUTROPHIL GELATINASE-ASSOCIATED LIPOCALIN (NGAL) IN RELATION TO RENAL ANEMIA OF HEMODIALYSIS PATIENTS

A Thesis Submitted In Partial Fulfillment For MD Degree in Internal Medicine

 $\mathbf{B}\mathbf{y}$

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علاقة ليبوكالين النيتروفيل المرتبط بالجيلاتيناز بفقر الدم الكلوي في مرضى الغسيل الدموي

رسالة مقدمة من

الطبيب / محمد أحمد محمد محمد خليل بكالوريوس الطب والجراحة _ ديسمبر 2003 ماجستير في الأمراض الباطنة العامة _ نوفمبر 2007 كلية الطب _ جامعة عين شمس

توطئة للحصول على درجة الدكتوراه في الأمراض الباطنة العامة

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ACKNOWLEDGEMENT

First and foremost, thanks to ALLAH, the most beneficient and merciful.

I wish to express my deepest gratitude to Prof. Dr. Gamal El-Sayed Ibrahim Mady, Professor of Internal Medicine, Faculty of Medicine, Ain Shams University, for proposing the study and for his step by step guidance and assistance throughout this work. The words cannot express my thanks to his expertise supervision, fruitful advice and encouragement.

I am very much obliged to the kindness and great help of Prof. Dr. Iman Ibrahim M. Sarhan, Professor of Internal Medicine, Faculty of Medicine, Ain Shams University, for her scientific guidance and assistance throughout this work. I am indebted to her for giving time and guiding with great patience.

No words could express my sincere appreciation and deepest gratitude to Prof. Dr. Heba Sayed Abdel-Aziz Asal, Professor of Internal Medicine, The National Research Center, Cairo, El-Dokki, for her continuous generous guidance, valuable criticism and encouragement throughout the whole research.

I want also to express my sincere gratitude to Dr. Inas Abdel Rasheed, Ass. Prof. of Clinical Pathology and Dr. Salwa Tawfik, Ass. Prof. of Internal Medicine, The National Research Center, Cairo, El-Dokki, for their tremendous effort, valuable help and support throughout this work.

I would like to thank very much Dr. Walid Anwar M. Abdel Mohsen and Dr. Walid Ahmed Bichari, Lecturers in Internal Medicine, Faculty of Medicine, Ain Shams University, for the great help, willing assistance and encouragement they offered me throughout this work.

ABBREVIATIONS

AKI: Acute kidney injury

ARF: Acute renal failure

BUN: Blood urea nitrogen

CKD: Chronic kidney disease

CRP: C-Reactive protein

D-CTIN: Drug-induced chronic tubulointerstitial nephritis

eGFR: estimated Glomerular filtration rate

EPO: Erythropoietin

ESAs: Erythropoietin stimulating agents

ESRD: End-stage renal disease

Hb: Hemoglobin

HD: Hemodialysis

MA: Microalbuminuria

NAPRTCS: North American Pediatric Renal Trials and

Collaborative Studies

NGAL: Neutrophil gelatinase associated lipocalin

NHANES: National Health and Nutrition Examination Survey

NKF-K/DOQI: National Kidney Foundation's Kidney Disease

Outcomes Quality Initiative

PD: Peritoneal dialysis

RES: Reticulo-endothelial system

r-HuEPO: Recombinant human erythropoietin

RRT: Renal replacement therapy

SIRS: Systemic inflammatory response syndrome

TIBC: Total iron binding capacity

TSAT: Transferrin saturation

USRDS: the United States Renal Data System

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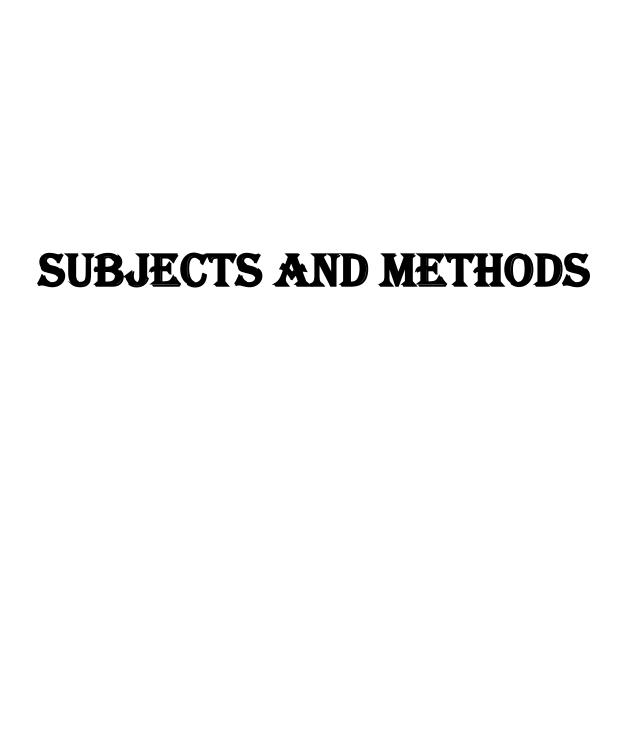
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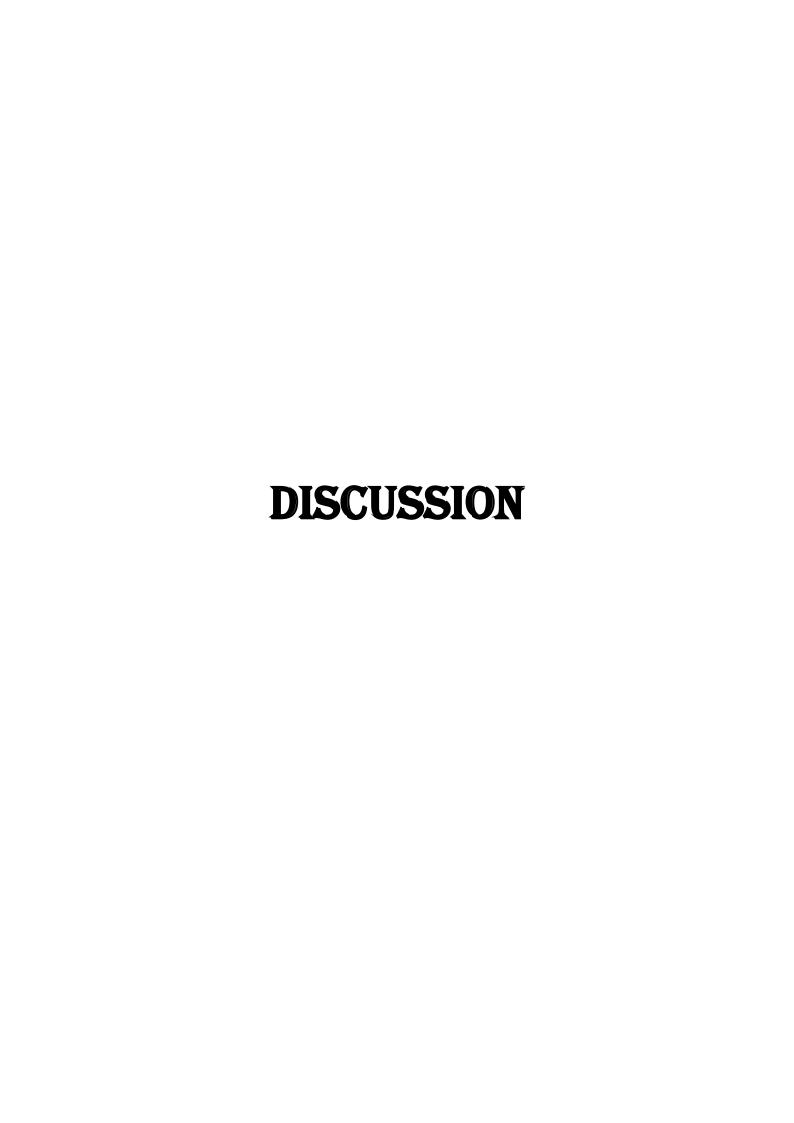
ACKNOWLEDGEMENT

INTRODUCION AND AIM OF THE WORK

REVIEW OF LITERATURE



RESULTS



SUMMARY AND CONCLUSION