بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

MONA MAGHRABY

Effect of Incremental Hemodialysis on Residual Kidney function and other Laboratory parameters In End stage Renal Disease patients starting Dialysis

Thesis

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By

Lotfy Mohamed Lotfy Abuelanin
M.Sc Internal medicine
Zagazig University

Under Supervision of

Prof. Dr. Magdy Mohamed EL-Sharkawy
Professor of Internal Medicine
Faculty of Medicine – Ain Shams University

Dr. Haitham Ezzat Abdel-aziz
Assistant Professor of Internal Medicine
Faculty of Medicine – Ain Shams University

Dr. Mohamed Saeed Hassan
Lecturer of Internal Medicine
Faculty of Medicine – Ain Shams University

Dr. Lina Essam Khedr
Lecturer of Internal Medicine
Faculty of Medicine – Ain Shams University

Faculty of Medicine
Ain Shams University
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Dedication

To the soul of my

Father and uncle

They give me everything, I gave them nothing

To My Dear Mother

To my Beloved Wife

To all my family and friends who supported

And helped me during working on this research

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Lotfy Mohamed Lotfy Abuelanin

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List of Abbreviations

Abb.	Full term
AAKHI	*Advancing american kidney health institute*
ADEMEX	*Adequacy of Peritoneal dialysis in Mexico*
B2M	*Beta-2- microglobulins*
BSA	*Body surface area*
BTP	*Beta trace protein*
BUN	*Blood urea nitrogen*
CANUSA	*Canada-USA*
CHOICE	*Choices for healthy outcomes in caring for endstage renal disease*
CI	*Confidence interval*
CKD	*Chronic kidney disease*
CMS	*Centers for medicare and Medicaid services*
DA	*Dalton*
D-LITE	*Dialysis less frequent in the elderly*
DM	*Diabetes mellitus*
EDTA	*Ethylene diamine tetra acetic acid*
eGFR	*Estimated glomerular filtration rate*
EKR	*Equivalent renal clearance*
ELISA	*Enzyme linked immunosorbent assay*
ESCO	*End stage renal diseases seamless care organization*
ESKD	*End stage kidney disease*
ESRD	*End stage renal disease*
FHN	*Frequent hemodialysis network*
GFR	*Glomerular filtration rate*
GN	*Glomerulonephritis*
HB	*Hemoglobin*
HD	*Hemodialysis*
HEMO	*Hemodialysis*

List of Abbreviations (Cont…)

Abb.	Full term
HPLC	*High performance liquid chromatography*
HS	*Highly significant*
HTN	*Hypertension*
IDWG	*Inter dialytic weight gain*
IHDIP	*Incremental hemodialysis in incident patients*
K	*Potassium*
KDOQI	*Kidney disease outcome quality initiative*
KFTs	*Kidney function tests*
KG	*Kilogram*
KRU	*Clearance of urea*
KT/V	*K clearance of urea T time V body volume*
LC-MS/MS	*Liquid chromatography-mass spectrometry*
mGFR	*Measured glomerular filtration rate*
NCDs	*National cooperative dialysis study*
NECOSAD	*Netherlands cooperative study on adequacy of dialysis*
NKF-KDOQI	*National kidney foundation-kidney disease outcmes quality initiative*
NS	*Non significant*
PD	*Peritoneal dialysis*
Ph	*Phosphorus*
PKD	*Poly cystic kdney disease*
PTH	*Parathyroid hormone*
RAAS	*Renin angiotensin aldosterone system*
RCT	*Randomized controlled trials*
RKF	*Residual kidney function*
ROC	*Receiver operating characteristic*
RRF	*Residual renal function*
SD	*Stander deviation*

List of Abbreviations (Cont…)

Abb.	Full term

SPECT.....*Single-photon emission computed tomography*
SPSS.....*Statistical package of social services*
TBW.....*Total body water*
TWO PLUS-HD ..... *Twice weekly versus thrice weekly hemodialysis in patients with incident end stage kidney disease*
URR.....*Urea reduction ratio*
USRDs.....*United states renal data system*
UV.....*Urine volume*
VTM.....*Variable target model*

INTRODUCTION

Incremental dialysis uses the concept of adjusting dialysis dose according to RRF so that the dialysis dose is individualized, the basis is to supply sufficient dialysis to provide supraminimum removal of uremic solutes and control of hypervolemia and then escalating.The dose of dialysis as RRF declines **(Daugirdas and Van store 2015)**.

In the developed world, maintenance hemodilaysis shifted from being given tow times a week with longer duration in 1960s and 1970s, to three times aweek. in 1980s, however there was no clinical trial to compare out comes before or after the switch was made. At present in the developing world especially India and china, a huge fraction of the dialysis population Is undergoing twice a week dialysis due to cost and logistic issue **(ROCCO et al., 2011).**

One aspect high lighted by most of the published experiences is that starting treatment with incremental hemodilaysis achieves better preservation of residual renal function **(Obi et al., 2016)**

Most renal units do not account for the presence of RRF in the HD prescription; however there has been renewed interest in this concept, with some recent observational studies suggesting that in criminal approach to HD initiation and less