BIOCHEMICAL STUDIES ON RENAL FAILURE AND ITS RELATION TO SOME HORMONES

A THESIS

Submitted in Partial Fulfillment for the Requirement of Master Degree in Biochemistry

By

Mohamed El-Sayed Hafiz

BSc, Science (1989)

Supervisors

Prof. Dr. Nadia M.Abdallah

Professor & Head of Biochemistry Dept.

Faculty of Science- Ain Shams University

Prof. Dr. Moustafa Abdallah Shousha

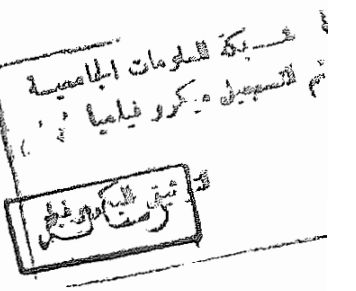
Professor of biochemistry

Atomic Energy Authority

Faculty of Science

Ain Shams University

1996



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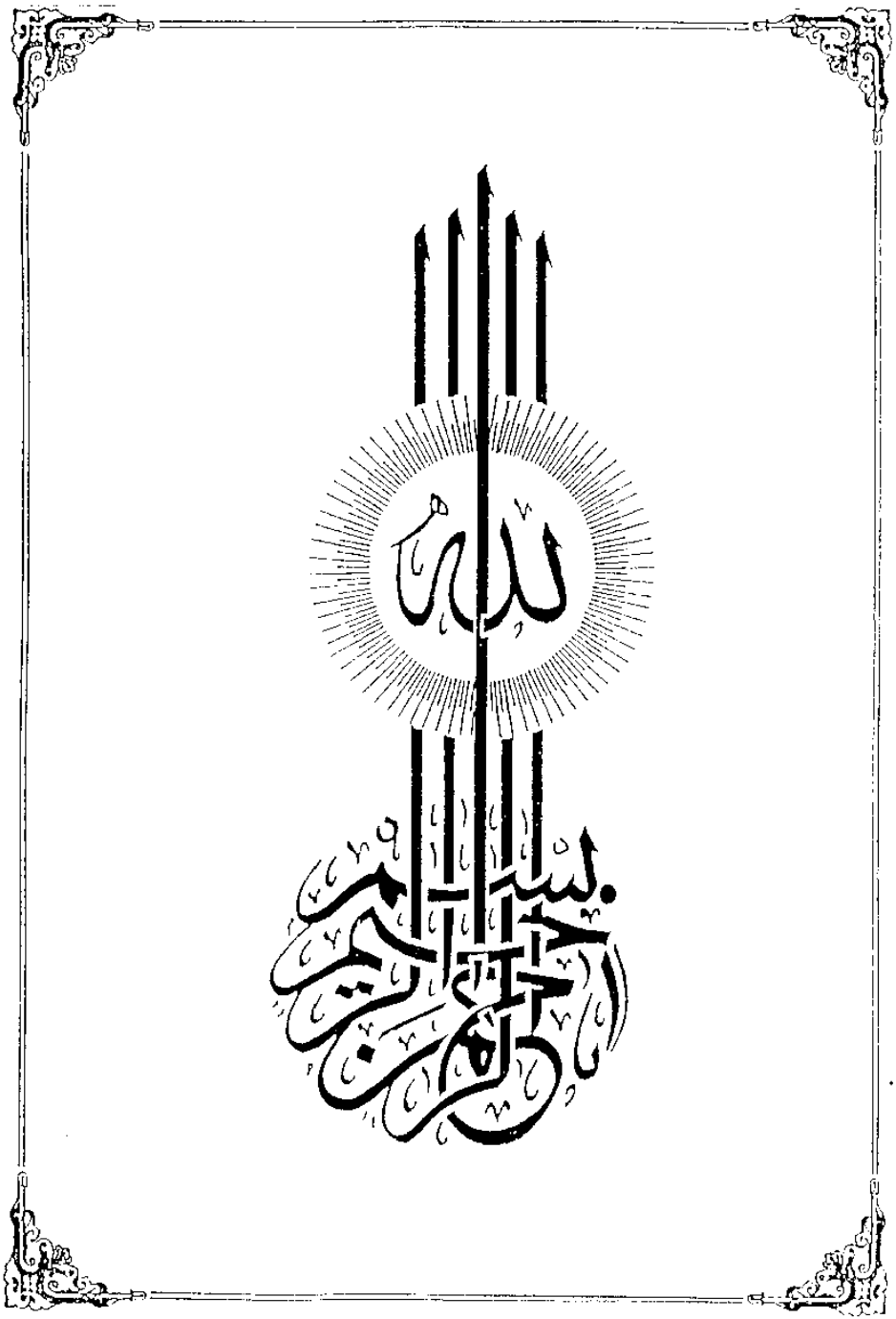

Dedicated to

My daughter

SALMA

for making everything worthwhile

I declare that this thesis has been composed by myself and the work of which it is a record has been done by myself. It has not been submitted for a degree at this or any other university.

Mohamed El-Syed Hafiz

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AIN SHAMS UNIVERSITY

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MOHAMED EL-SAYED HAFIZ EL-SAEID.
BIOCHEMICAL STUDIES ON CHRONIC RENAL FAILURE AND ITS RELATION TO SOME HORMONES.
BIOCHEMISTRY DEP.-FACULTY OF SCIENCE-AIN SHAMS UNIVERSITY.

Using assays that employ the antibody coated tubes technique, Thyroid hormone levels were measured in 35 patients with chronic renal failure on regular haemodialysis for a mean period of 20.3 $\pm$ 8.7 months. The findings were compared to those of 15 healthy controls. All patients were clinically euthyroid. The mean value of total thyroxine (T4), total triiodothyronine (T3), free thyroxine (FT4) and the free triiodothyronine (FT3) were low in patients compared with controls ($P<0.001$). The mean basal thyroid stimulating hormone (TSH) levels were significantly higher in patients than in controls ($P<0.05$). Although all patients were clinically euthyroid, the biochemical features suggest hypothyroidism


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ACKNOWLEDGMENT

First and foremost, thanks are due to God, the beneficent and merciful.

I would like also to express my deep appreciation and gratitude to **Prof. Dr. Nadia Mohamed Abdallah**, Professor and Head of the Biochemistry Department, Faculty of Science, Ain Shams University, for her valuable supervision,Sincere guidance, constructive suggestions and unlimited help without which this work would have not reached its present status.

I do feel greatly indebted to **Prof. Dr. Moustafa Abdallah Shousha,** Prof. of Biochemistry, Radioisotope Applications Division Atomic Energy Authority, for his kind revision, continuous guiding, supervision and encouragement throughout this work

My gratitude goes to **Prof. Dr. Waheed Mahmoud El-Herrizi**, Prof. of Biochemistry, Faculty of Medicine, Cairo University who gave me valuable suggestions.

Posthumous thanks are due to the soul of the late **Prof. Dr. Abd El-Moniem El-Gauhary**, Professor of Biochemistry, Faculty of Science, Ain Shams University, for his experienced guidance and endless support.

Finally, a very special thanks to my supportive and considerate **wife, Sora,** who had the foresight to encourage me to undertake this Study, who supported me during the days of intensive work, and who created an environment in which I could devote the many hours required for the preparation of this thesis. To all my sincerest thank you.

M.E.Hafiz

1996


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LIST OF ABBREVIATIONS

- ADH	Antidiuretic hormone.
- ATP	Adinosine tri-phosphate.
- BMR	Basal metabolic rate.
- CAPD	Continuous ambulatory peritoneal dialysis.
- Chol	Cholesterol.
- CPM	Counts per minute.
- CRF	Chronic renal failure.
- DPC	Diagnostic product corporation.
- ESRD	End stage renal disease.
- FT3	Free triiodothyronine.
- FT4	Free tetraiodothyronine.
- GARGG	Goat anti-rabbit gamma globulin.
- GFR	Glomerular filtration rate.
- HD	Haemodialysis.
- HDL	High density lipoprotein.
- MB	Maximum binding.
- mRNA	Messenger ribonucleic acid.
- NADP	Nucleotide adenosine diphosphate.
- NSB	Non specific binding.
- NTI	Non thyroid illness.
- PEG	Polyethylene glycol.
- PTH	Parathyroid hormone
- RIA	Radioimmunoassay.
- rT3	reverse triiodothyronine.
- SD	Standard deviation.
- SE	Standard error.
- TBG	Thyroxine binding globulin.


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