شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالأصل

Faculty of Postgraduate Childhood Studies
Department of Medical Studies for Children
Ain Shams University

Effect of Compliance to therapy of Congenital Hypothyroidism on the Neurodevelopmental outcome

A Thesis

Submitted for Partial fulfillment of Master Degree in Childhood Studies Department of Medical Studies for Children

By
Ahmed Ehab Ramzy Bedir

Supervised By

Prof. Hayam Kamal Nazif
Professor of Pediatrics
Department of Medical Studies for Children
Faculty of Postgraduate Childhood Studies
Ain Shams University

Prof. Howyda Mohamed Kamal Shaaban
Professor of clinical and Chemical Pathology
Benha Faculty of Medicine
Benha University

Ain Shams University
2021

سورة البقرة الآية: ٣٢

Acknowledgment

First and foremost, thanks to ALLAH for helping me to achieve this work.

Special thanks to **Prof. Hayam Kamal Nazif,** Professor of Pediatrics Department of Medical Studies, Faculty of Postgraduate Childhood Studies, Ain Shams University, for her continuous support, sincere advice, planning, continuous guidance, encouragement and help which made the accomplishment of this work possible and easy.

I would like to express my deep gratitude to **Prof. Howyda Mohamed Kamal Shaaban,** Professor of clinical and Chemical Pathology Benha Faculty of Medicine, for her continuous guidance, and encouragement, supervision and her moral support which put the work on the correct path.

I am deeply indebted to **Dr. Dina Mohamed Fouad Khaled,** Lecturer of Phoniatrics, Department of Medical Studies Faculty of Postgraduate Childhood Studies, Ain Shams University for her generous help and cooperation in offering her advice for achieving this work.

I would to thank **Dr. Samer Hamed Elkhayat,** Lecturer of Pediatric Neurology, Department of Medical Studies Faculty of Postgraduate Childhood Studies, Ain Shams University for his great efforts to guide me through this thesis.

Also, I am much thankful to **all patients and volunteers** included in this study and their parents and to the health care providers for their cooperation.

List of Contents

List of Abbreviations

Abb.	Full term
99mTc	Technetium-99m
AAP	American Academy of Pediatrics
ACTH	Adrenocorticotrophic hormone
ADH	Antidiuretic hormone
BIA	Bacterial inhibition assay
BMQ	Beliefs About Medicines Questionnaire.
CH	Congenital hypothyroidism
DBS	Dried blood spot
DH	Dyshormonogenesis
DIT	Diiodotyrosine
DM	Diabetes Mellitus
DUOX2	Dual oxidase 2
ESPE	European Society for Pediatric Endocrinology
FT3	Free T3
FT4	Free T4
GH	Growth hormone
GPAS	G-protein alpha subunit
HPT	Hypothalamic-pituitary-thyroid
HRQoL	Health-related quality of life
ICU	Intensive care unit
IQ	Intellectual Quotient
LBW	Low birth weight
L-T4	Levothyroxine
MCT8	Monocarboxylase transporter 8
MEMS	Medication event monitoring system
MIT	Monoiodotyrosine
MOHP	Ministry of Health and Population
NBS	Newborn Screening
NICU	Neonatal intensive care unit
PAX8	Paired box gene eight
PCH	Permanent congenital hypothyroidism
PIOD	Partial iodide organification defects
PKU	Phenylketonuria
PSIS	Pituitary stalk interruption syndrome

PTH ..... Parathyroid hormone
QoL ..... Quality of life
RAI..... Radioactive iodine
SBP2..... Sequence binding protein 2
SMR..... Standardized Mortality Ratio.
T3..... Triiodothyronine
T4..... Thyroxine
TBG ..... Thyroid binding globulin
TBG ..... Thyroxine-binding globulin
TD..... Thyroid dysgenesis
Tg..... Thyroglobulin
TH..... Thyroid hormone
TH..... Transient hypothyroidism
THOX2 ..... Thyroid oxidase 2
TIOD..... Total iodide organification defects
TPO..... Thyroid peroxidase
TRBAbs ..... Thyroid receptor blocking Abs
TRH ..... Thyrotropin-releasing hormone
TSH..... Thyroid-stimulating hormone
TTF-1..... Thyroid transcription factor-1
TTF-2..... Thyroid transcription factor-2
UI..... Urinary iodine
US..... United States
VLBW ..... Very low birth weight
WHO..... World Health Organization

List of Tables

List of Tables Cont...

Table No.	Title	Page No.

List of Tables Cont...