





ثبكة المعلومات الجامعية





جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأفلام قد اعدت دون آية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15-20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of 15-25c and relative humidity 20-40 %



ثبكة المعلومات الجامعية







NOCTURNAL ENURESIS IN ADOLESCENTS



Thesis

SUBMITTED IN PARTIAL FULFILLMENT FOR MASTER DEGREE

IN PEDIATRICS

Presented By

Eman Youssef Abd Alla Mahmoud

(M.B., B.Ch.)

Supervisors

Prof. Dr. Farahat Abdel Ghany El-Gazzar

Professor of Pediatrics
Faculty of Medicine, Menoufiya University

CARAHA

Prof. Dr. Aly Mohamad El-Shafei

Professor of Pediatrics / Faculty of Medicine, Menoufiya University

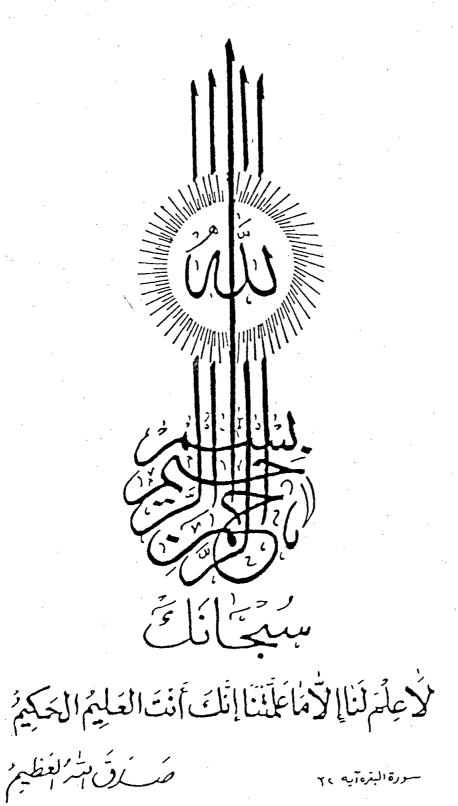
Dr. Osama Abdel-Wahab Abd El-Gawad

Lecturer of Urology
Faculty of Medicine, Menoufiya University

1204

FACULTY OF MEDICINE MENOUFIYA UNIVERSITY

1996



رآن کریم

To my beloved famliy

Acknowledgment

Thanks for **God** for helping me to start and finish this work. Without his guidance this work would have never been finished.

I would like to express my sincere thanks and gratitude to Prof. Dr. Farahat A. El-Gazzar, Professor of Paediatrics, Faculty of Medicine, Menoufiya University for his valuable advice and meticulous supervision.

I am deeply indebted to **Prof. Dr. Aly M. El-Shafei**, Professor of Paediatrics, Faculty of Medicine, Menoufiya University for his valuable guidance and close supervision.

I would like to express my deepest appreciation to **Dr. Osama A. Abd El-Gawad**, Lecturer of Urology, Faculty of Medicine,

Menoufiya University for his welling help and generous advice.

I would like to express my deepest thanks and gratitude to all the staff members of the pediatric and urology departments for their help and advice.

I wish to express my gratitude to **Dr. Gaafar Abd El-Rasoul**, Assistant Proffesor of Community Medicine, Faculty of Medicine, Menoufiya University for his valuable efforts in performing the statistics of this work.

CONTENTS

I. Introduction and aim of the work	1
II. Review of the literature	3
Anatomy	3
- The urinary bladder.	3
- The bladder neck	5 .
- The voluntary external sphincter	7
- Neuroanatomy	9
 Physiological development of micturition control 	11
- Maturation of bladder control	11
- The basic storage-voiding mechaisms.	13
Nocturnal enuresis	19
- Definition	19
- Incidence	19
- Etiology	21
- Evaluation	40
- Treatment	48
III. Patients and methods	56
IV. Results	62
V. Discussion	74
VI. Summary	82
VII. Conclusion	84
VIII. Recommendations	85
IX. References	86
X. Arabic Summary	

LIST OF TABLES

Table (1):	Distribution of personal factors in 50 cases of enuresis	63
Table (2):	Distribution of frequency of wetting episodes and urinary symptoms in 50 cases with enuresis	64
Table (3):	Laboratory findings in 50 enuretic cases	65
Table (4):	Radiological and ultrasonographic findings in 50 cases of enuresis	66
Table (5):	Urodynamic findings in fifty nocturnal enuretic adolescents	67
Table (6):	Relation between reduced bladder capacity and other standard variables	68
Table (7):	Relation between detrusor instability and other standard variables	69

·		
Environ production of the control of	D. O.	
INTRODUCTION A AIM OF THE WO		
· · · · · · · · · · · · · · · · · · ·		

INTRODUCTION

Descriptions of involuntary bed-wetting can be found in documents dating back to 1500 B.C., from these historical literature, it can be seen that even in ancient times bed-wetting was a great social problem (Norgaard et al., 1989).

Nocturnal enuretic children are basically, biologically and psychologically similar to normal children, however, they do not awaken when the bladder is full while asleep. Many theories have been proposed to explain enuresis, but because enuresis is a symptom not a disease, it is likely that no single hypothesis will explain all cases and that in each instance multiple factors may be present (Koff, 1992 and Rushton, 1995).

AIM OF THE WORK

The aim of this study is to evaluate cases of enuresis at adolescence (10 - 15 years old) by different investigative techniques with special emphasis on the urodynamic studies to detect any bladder or urethral sphincteric dysfunction, this may be of great help in planning for their management.

	
	**

•	
•	
•	
E	
E	
E	
E	
E	
E	
E	

REVIEW OF LITERATURE