

CONTENTS

	Page
Introduction	1
Aim of the work.....	3
Review of literature	
Anatomy of the pharynx and nose.....	4
Stages and architecture of normal sleep.....	9
Pathophysiology of OSA.....	17
Cardiovascular effects of OSA.....	29
Diagnosis of OSA.....	56
Overview of the management of OSA.....	77
CPAP in adult population.....	80
Oral appliances in treatment of OSA.....	85
Pharmacologic therapy of OSA.....	90
Surgical treatment of OSA.....	93
Materials and methods.....	121
Results.....	141
Discussion.....	210
Conclusions.....	236
Summary.....	237
References.....	241

ACKNOWLEDGMENT

First and foremost thanks to "GOD" for help me to fulfill this work.

I am greatly and appreciably thankful to **prof. Dr. Adel Ahmed Helmy**, Professor of ENT surgery, Benha faculty of medicine, Zagazeg University for his generous encouragement, kind supervision, interest and advice.

I am extremely grateful to **prof. Dr. Ashraf Salah El Hamshary**, Professor of ENT surgery, Benha faculty of medicine , Zagazeg University and **Prof. Dr. Hussam Al Deen Mohamed Abd El Azeem**. Assistant Professor of ENT surgery , Benha faculty of medicine , Zagazeg University for cooperation, helpful direction and continuous encouragement.

I would like to express my deepest gratitude to **Prof. Dr. Osama Sanad Arafa**, Professor of Cardiology, Benha faculty of medicine, Zagazeg University for his help throughout this work and supervision.

Figure (42): Mean age (years), weight (Kg) and height (cm) of studied groups

Figure (43): gender distribution of studied groups

Figure (44): Post operative subjective EDS response to nasal and Oropharyngeal surgery

Figure (45): nasal examination of nasal OSA patients

Oropharyngeal OSA patients

Figure (46): Oropharyngeal examination of Oropharyngeal OSA patients

Figure (47): Types of operations done in studied obstructive sleep apnea(OA) patients

Figure (48): Heart rate and blood pressure before and after surgery in Oropharyngeal sleep apnea patients

Figure (49): *Heart rate and blood pressure before and after surgery in nasal Oropharyngeal sleep apnea patients*

Figure (50): *Spirometric measurements of nasal obstructive sleep apnea (OSA) patients before and after surgery*

Figure (51): *Spirometric measurements of Oropharyngeal obstructive sleep apnea (OSA) patients before and after surgery*

Figure (53): *Echocardiographic measurements of nasal obstructive sleep apnea (OSA) patients before and after surgery*

Figure (54): *PASP of nasal OSA patients before and after surgery*

Figure (55): *Echocardiographic measurements of Oropharyngeal obstructive sleep apnea (OSA) patients before and after surgery*

Figure (56): *PASP of Oropharyngeal OSA patients before and after surgery*

Figure (60): *Arterial blood gases concentrations before and after surgery in nasal obstructive sleep apnea patients*

Figure (61): *Arterial blood gases concentrations before and after surgery in nasal obstructive sleep apnea patients*

Figure (62): *Electrocardiographic finding before and after surgery in nasal obstructive sleep apnea patients*

Figure (63): *Electrocardiographic finding before and after surgery in Oropharyngeal obstructive sleep apnea patients*

Figure (68): percentage of patients having improved Polysomnography parameters in both nasal and OSA patients