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SLEEP APNEA SYNDROME IN CHRONIC RENAL FAILURE PATIENTS

Thesis

Submitted For The Partial Fullfillment

Of The Master Degree In

Internal Medicine

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وقل رب زدنی علماً

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List of Tables Clinical Charactrestics of Patients with C.S.A (1)Clinical Classifications of C.S.A (2)(3)Normal Values of Sleep Stages General Data of the Patients (4)(5)General Data of the Patients General Data of the Patients (6)(7)General Data of the Patients (8)General Data of the Patients DBEs During Sleep (9)(10)DBEs During Sleep (11)DBEs During Sleep (12)Sleep Patterns (13)Sleep Patterns (14)Sleep Patterns (15)Arterial Blood Oxygen Desaturation (16)Arterial Blood Oxygen Desaturation Arterial Blood Oxygen Desaturation (17)

List of Figuers							
- Electroencephalogram Waves of Sleep Stages							
- Sleep Trace 2000, Polysomnogram							
-Patient Connected to the Sleep Trace 2000							
Polysomnogram							
- Scoring Summary of Polysomnogram							
- Oxygen Saturation Summary							
- Respiratory Event Histogram							
- Percentage of Types of Apnea in the Studied Group							
- Percentage of Sleep Stages in the Studied Group							
-Percentage of Sleep Latencies in Different Sleep							
Stages	(9)						
-Percentage of Number of Oxygen Desaturation in							
Different Sleep Stages							
- Correlation Between no. of DBEs and Hb							
-Correlation Between no. of DBEs and Serum							
Creatinine							
- Correlation Between no. of DBEs and BUN							
-Correlation Between no. of DBEs and Diastolic Blood							
Pressure							
- Correlation Between no. of DBEs and Sleep Stages							
(1&2)	(15)						
-Correlation Between no. of DBEs and Sleep							
Efficiency	(16)						
- Correlation Between SBD Index and Sleep Efficiency							

- Correlation	Between S	BD Index	and	l Arterial	pН	(18)
-Correlation	Between	Number	of	Arterial	Oxygen	
Desaturation in REM and Serum Creatinine						
-Correlation	Detween	Number	of	Arterial	Oxygen	
Desaturation	n in NREM	and Hb				(20)
-Correlation	Between	Number	of	Arterial	Oxygen	
Desaturation	n in NREM	and BUN				(21)
-Correlation	Between	Number	of	Arterial	Oxygen	
Desaturation in NREM and Serum Creatinine						
				-		

List of Abbreviations

REM : Rapid Eye Movement

NREM: Non Rapid Eye Movement

EEG : Electro Encaphalo Grame

EOG : Electro Oculo Grame

EMG: Electro Myo Grame

Ppa : Pulmonary Artery Pressure

PVC : Premature Ventricular Contraction

PCo2 : Arterial blood concentration of carbon dioxid

PO2 : Arterial blood concentration of oxygen

SDB: Sleep Disordered Breathing

DBEs : Disordered Brething Events

CSA : Central Sleep Apnea

OSA : Obstructive Sleep Apnea

HD: Haemo dialysis

CRF : Chronic Renal Failure

CPAP : Continuous Positive Airway Pressure

EPAP : Expiratory Positive Airway Pressure

BCAA: Branched Chain Amino Acids

BUN : Blood Urea Nitrogen

SAo₂: Blood Oxyhemoglobin Saturation

Introduction

INTRODUCTION

Sleep apnea is defined as greater than ten seconds pause in respiration during sleep. This pause may take the from of obstructive apnea caused by closure of the pharyngeal airway during respiration, central apnea caused by lack of central respiratory drive, or a combination of both (mixed apnea) component (Philipson., 1978).

Sleep disordes including sleep apnea syndrome were encountered in different clinical setting like intrinsic lung diseases e.g. chronic obstructive pulmonary disease (COPD), bronchial asthma and cystic lung fibrosis. It is also seen in diseases of central and peripheral nervous systems e.g. brain tumours or abscesses, DM associated with neuropathy.

Also, it is seen in different hormonal disturbances e.g. hypothyroidism and acromegaly (Fletcher and Schaaf., 1986).

Sleep disorders including high incidence of sleep apnea have become a topic of increasing clinical interest in chronic renal failure (CRF) patients on haemodialysis (HD) (Mendelson and Wadhwara., 1990).

The incidence of sleep apnea in end stage renal disease (ESRD) appears to be higher than that found in the general population where sleep apnea is reported to occur at a rate of 0.9 to 7.8% (Young, and Zaccaro., 1990).

Data regarding sleep disorders including sleep apnea in patients with ESRD are extremely limited (Strub.,1982).