
Sleep Apnea Or Pickwickian Syndrome

Sleep apnea also prior known as Pickwickian Syndrome was not prevalent until the discovery of it during 1837 by doctor Charles Dickens, but it was not later acknowledged until the late 20th century. Sleep Apnea is an obstructive sleep disorder that occurs during a person's sleep cycle. It affects a person's ability to breathe through a regular night's sleep. There are three forms of sleep apnea which are obstructive sleep apnea which prevents an individual from breathing, central sleep apnea, and mixed apnea. The most common being obstructive sleep apnea (OSA) and it disrupts a person's ability to sleep well.

Anyone may develop sleep apnea at any point in life. It is calculated that at least 12 to 18 million Americans suffer from sleep apnea. More than half of those who get sleep apnea is related to excessive fat. Roughly, 20 to 60 per cent of elderly individuals who are obese develop Sleep apnea some time throughout life. Research suggests that one to ten per cent of adults in the U.S. have obstructive sleep apnea(OSA). Sleep apnea is more prevalent in males than in females. One in twenty-five middle-aged men and one in fifty females get sleep apnea in their late adulthood. Roughly three per cent of kids and ten per cent of individuals aged sixty-five have this condition. Central apnea is even more common in people who have neurological underlying conditions or heart failure. Among premature babies whose nervous systems are not fully formed, central apnea is more common, and in very elderly people whose nervous systems can fail. Central apnea is even more common in people who have neurological underlying conditions or heart failure.

Sleep apnea occurs when there is shallow breathing, or pauses, at respiration. Pauses lasting longer than sixty minutes can trigger the "fight or flight" response in the mind, which may make the individual gasp or cough. OSA is caused by the partial or total collapse of the pharyngeal airway (i.e., obstruction), The least common form of central sleep apnea (CSA) is a CNS condition in which the brainstem (i.e., the portion of the brain that regulates breathing) does not signal respiratory muscles to promote inhalation; and A mixture of obstructive and central symptoms is characterized by mixed sleep apnea (MSA; also called complex sleep apnea). SA complications stem from chronic nocturnal hypoxemia which hypercapnia and include elevated blood pressure (HTN) This disrupts regular sleep and may cause insomnia. Some facial structures may affect an individual from developing Sleep Apnea. A Smaller Jaw may affect the chances of developing sleep apnea at a much higher risk. Obesity is also another major cause of sleep apnea. Obstructive apnea can occur in children with severely enlarged tonsils or adenoids, as well as in individuals with obesity. OSA develops when an individual's epiglottis shuts the back of the throat, relaxes, and collapses, momentarily restricting the airway from flowing. It prevents oxygen from entering the lungs for approximately 10 seconds or longer, often lasting more than a minute before early warning signs start to pop up in the brain which is deprived of oxygen(Marcus 2009). This is when the hippocampus gives impulses to wake up and breathe in the apnea sleeper. Central apnea is even more common in people who have neurological underlying conditions or heart failure.

The most common signs and symptoms of sleep apnea include A characteristic of OSA is the vibration of pharyngeal tissues arising from the passage of air through a narrowed upper airway. In 95 per cent of cases, this distinctive snoring pattern is registered. The patient starts snoring

and then stops breathing for 10 seconds (apnea) or more (Yantis 20). The apnea mutes the snoring briefly, and the patient awakens with a loud snort from it. This cycle endures from approximately seconds to a minute and it occurs for a consecutive amount of time throughout the night and individuals are unaware of the symptoms. Frequently those with OSA and CSA have snoring, tiredness during the day, headaches in the morning, unrestful nights of sleep, trouble waking up, changes in personality, poor judgment, and a difficult time paying attention. People with OSA are at higher risk of getting into a motor accident because of excessive sleepiness throughout the day. Many sleep apnea signs can include sexual dysfunction, lack of focus, memory loss, mental impairment, and changes in behaviour such as anxiety and depression. Sleep apnea, however, is related to hot flashes and nocturia, or increased urination frequency at night. Bedwetting is correlated to sleep apnea in infants. Sleep apnea can cause severe cardiovascular changes. Hypertension is normal during the daytime (high blood pressure). This would be possible to increase the number of red blood cells (polycythemia), and so is the case for a swollen left ventricle of the heart (cor pulmonale), and left ventricular failure. Sleep apnea in many people causes life-threatening changes in the arrhythmia such as bradycardia and tachycardia. Another common symptom is a lack of CO₂ and hypercapnia.

Sleep apnea is diagnosed in several ways such as patient screening for oral surgery.

Acknowledging the diagnosis usually requires assessments to be performed while the individual is sleeping. These observations are called a study of polysomnography and are conducted out in a specialized sleep laboratory during an overnight stay. Significant aspects of the polysomnography study involve observations of the patients' cardiac rate, oral and nasal circulation, respiratory stress, the stages of sleep (e.c light sleep, deep sleep, and rem sleep), also the levels of oxygen in the blood. A patient may be asked to consult a doctor which if so The Physician will ask for a medical history including the use of drugs, Alcohol, A family history of sleep apnea, Headaches, or disorientation in the morning. The Physician will also examine any signs of narrowing of the adenoids or Airway passages. Measuring the cardiac output, blood oxygen, and CO₂ levels while reducing mucus-producing substances and reducing fats offer the most positive results among apnea patients through alternative treatments. A physician may ask for an examination of the Pharyngeal Airway, Increase BMI (body mass index), HTN (hypertension), or other abnormalities of the airways. Laboratory test measures the patient's CBC, Hypothyroidism, Thyroid abnormalities, Or any drug effects. Other tests done for patients with sleep apnea or EKG, ECG, To measure airflow, arterial oxygen saturation, respiratory rate. X-rays may also determine the patient's nostrils and adenoids size and if adenotonsillar hypertrophy is prevalent.

There are many treatments for sleep apnea that may help improve a patient's quality of life. Some Alternative treatments are the opening of the nasal passageways using either clips Holders or tape. Patients with Osa or CSA Well often need sleep ventilators, also known as CPAP, in order to open up the Airways. This CPAP allows the airways to stay continuously open. Roughly two-thirds of individuals using this treatment have shown improvements during sleep. A more effective alternative is the use of BiPAP Which reduces the Airways as a person is exhaling. A study evaluated By the Cleveland Clinic in 2007 the patients who Used BiPAP had a better night sleep and prevented sleep during the daytime. Some work suggests that CPAP can help prevent the damage from continuing, and can reverse the harm already caused. A study published at the Cleveland Clinic and published in 2007 reported that though CPAP enhances sleep significantly and decreases sleep problems, its impact on cardiovascular events remained unknown. Another effective method is the use of devices such as Oral devices

designed to increase respiration by either maintaining the tongue in a certain position or by moving the lower jaw forward during sleep to increase the volume of oxygen in the respiratory tract. Another device is known as a Tongue Retention System (TRD). The second kind is called an oral protrusive device (OPD) or mandibular advance splint (MAS) because it protects the mandible. Surgery such as uvulopalatopharyngoplasty (UPPP) can also be an effective treatment to remove excess tissue surrounding the throat. A modified tracheostomy can help open up the airways by a 2mm tube incision in the throat. Another surgery is Reconstructive jaw surgery or genioplasty.

The application of lifestyle modifications, breathing aid, drug treatment, and surgery provides for a successful treatment among most patients with sleep apnea, though it may take more time to determine the most effective and least intrusive treatment. Upon starting a procedure, polysomnography analysis is usually required to determine how successful the procedure has been. Untreated sleep apnea may result in serious life-threatening symptoms for example increased risk of heart attack, heart failure, stroke, coronary heart disease, and type II diabetes. For children sleep apnea recovery is at a higher risk if treated correctly. At least 42 per cent of children were not symptomatic of sleep apnea after being watched for a period of time.

Sleep apnea can be prevented in a few ways, some of these ways are controlling the daily intake of food and losing weight, reducing smoking sessions which can damage the upper airways and snoring(apnea) even worse. Avoid the use of alcohol and tranquilizers, and change the position of sleep for example, with individuals who are obese the best position is the upright position. Frequent exercise may also improve the quality of sleep in those with sleep apnea. As well as maintaining a consistent sleep schedule.

Sleep apnea is a serious sleep disorder that can affect a person's quality of life. It affects millions of people worldwide and is one of the main types of sleep disorders. Sleep apnea is caused by slight or complete closure of the pharyngeal airways(OSA), improper malfunction of the brain stem to allow airways to respire(CSA), or a mixture of both(MSA). Those with sleep apnea will complain about tiredness, lack of focus, frequent urination, headaches, poor judgment, Hypertension, anxiety, depression, etc. Sleep apnea can be treated with ventilators, medical devices, and certain surgeries. Patients usually need medical treatment for a specific amount of time depending on the severity examined.