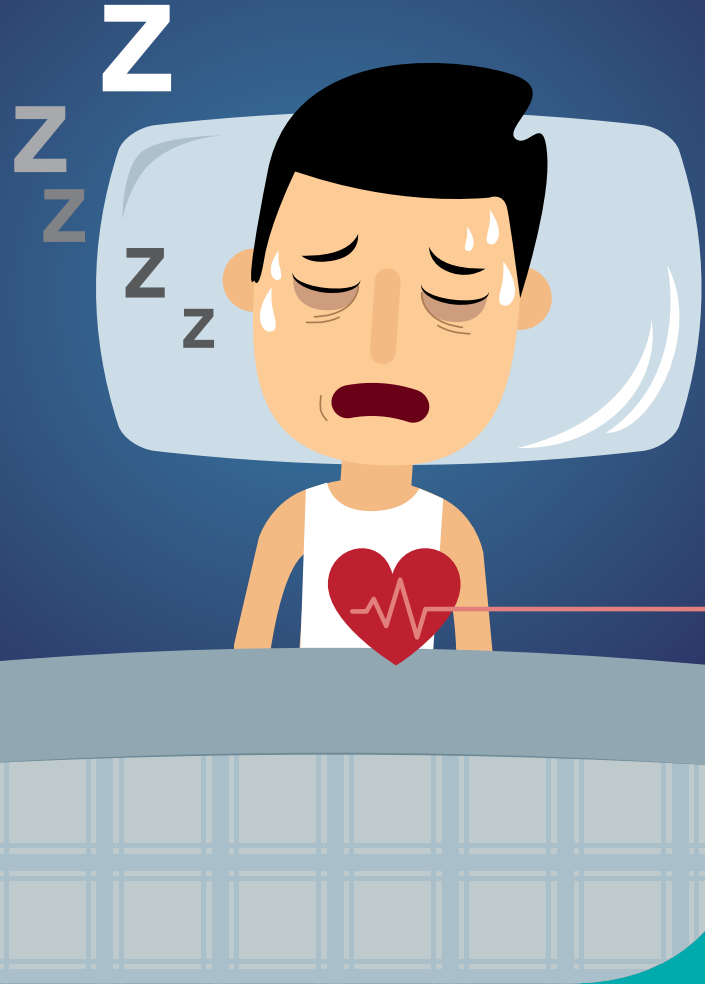


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Closed on Sundays and Public Holidays
Consultation by Appointment



Sleep Apnea



For enquiries and appointments,
please contact us

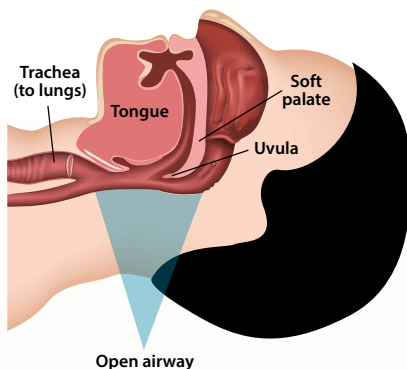
Sleep Apnea

Patients with sleep apnea may stop breathing intermittently while sleeping. There are 3 types of sleep apnea, i.e. obstructive sleep apnea, central sleep apnea and mixed sleep apnea.

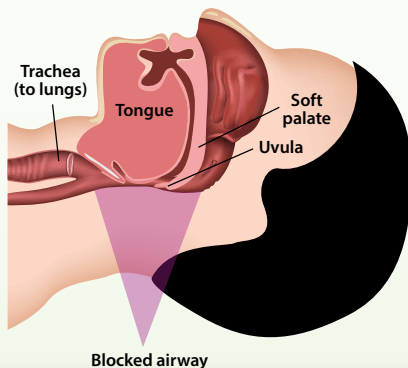
- **Obstructive sleep apnea:** one's breathing stops when the throat narrows or closes
- **Central sleep apnea:** one can't breathe as no signals are sent by the brain to the muscles that regulates breathing
- **Mixed sleep apnea:** a combination of obstructive and central sleep apnea

This pamphlet focuses on obstructive sleep apnea (OSA).

Normal sleep



Sleep apnea



The airway normally remains open during sleep, through which air passes from the nose and mouth to the lungs. In sleep apnea, the air-flow is blocked off by soft tissues of the throat and / or tongue in the upper airway. That is why patients with sleep apnea snore loudly and suffer from interrupted breathing during sleep.

Being unaware of interrupted breathing during sleep, sleep apnea patients might get woken up from time to time during the night, feeling suffocated and gasping for breath. Besides, loud snoring usually goes unnoticed unless they are told by their bed partners.

Symptoms

You may be suffering from obstructive sleep apnea if you have:

- Heavy snoring
- "Pauses" of breathing during sleep
- Feeling "suffocated" during sleep
- Excessive daytime sleepiness
- Morning headache
- Going to bathroom during the night (nocturia)

Some patients may not have any symptoms, or in fact, they may fail to notice any symptoms. They feel tired during the day and it is attributed to busy work schedules. Some people may think that snoring is common during sleep.

Risk Factors

- **Age:** OSA affects all age groups, it is more prevalent among the middle-aged and the elderly groups
- **Sex:** male is twice more likely to have OSA than female, especially in the middle-aged group
- **Obesity:** the more serious the obesity, the greater the risk
- **Sedative effects of medications or alcohol:** despite breathing is being interrupted, OSA patients may not wake up from sleep after taking some sedative medications or consuming alcohol
- **Structural abnormality of the upper airway**

Do I Have Sleep Apnea?

You can undergo a "sleep study" in a sleep laboratory room or at home. Your heart rate, breathing and other bodily functions are monitored overnight during the study for a definitive diagnosis.

How Could I Help Myself If I Have Sleep Apnea?

- Try to sleep in lateral positions (not necessarily practical but useful to most as sleep position is not within one's control)
- If overweight, try to lose some pounds
- Stop drinking alcohol

OSA Health Consequences

Possible complications include excessive sleepiness during the day and poor concentration, which may lead to accidents and poor work performance. Recent studies have shown that OSA patients are twice or thrice more likely to get involved in a car accident than people without OSA. Patients are advised to discuss with their doctors with regard to driving, working or performing risky tasks.

OSA can lead to changes in heart rate and blood pressure during sleep. If untreated, the risk of cardiovascular problems such as high blood pressure, heart attack, abnormal heart rhythms, or stroke may increase.

Health consequences of OSA include:



Restless sleep



Daytime sleepiness



Morning headache



Hypertension



Heart disease



Heart failure



Gastroesophageal reflux disease (GERD)



Arrhythmia



Stroke



Poor short term memory



Decrease in concentration span



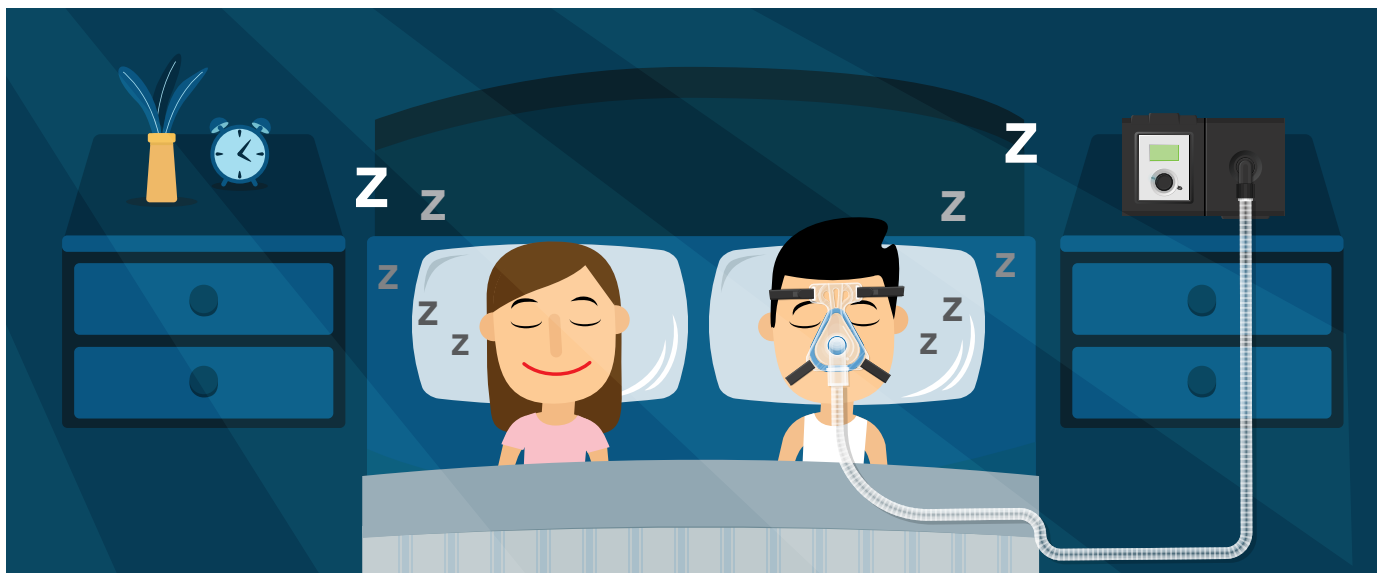
Poor performance at school/ work



Diabetes



Sexual dysfunction



How is Sleep Apnea Treated?

Losing weight does help for patients with sleep apnea, especially if one is already overweight or obese. Other treatments include positional therapy, continuous positive airway pressure, oral appliance and surgery (for selected patients). Continuous Positive Airway Pressure (CPAP) is the gold standard and most effective treatment for sleep apnea. This small machine helps to keep the upper airway open for breathing during sleep.

For CPAP treatment, patients are required to wear a mask, through which air is blown gently into the nose to maintain enough pressure to keep the upper airway patent. Some CPAP nasal masks or prongs cover or fit into the nose, while others fit over the nose and mouth.

Patients may at first feel uncomfortable when wearing a CPAP mask, or find the CPAP machine too noisy for use during sleep. Some patience is needed for adaptation and adjustment, as most OSA patients do feel refreshed the next morning after using CPAP, if they tolerate it.

Another treatment option is "oral appliance" or "mandibular advancement device", which is fitted on the teeth to keep the upper airway open during sleep. This is shown to be effective for patients with mild sleep apnea.