

Sleep apnea

is affecting more and more people in Hong Kong. People who suffer from sleep apnea have pauses in breathing while sleeping. Each episode may last for 10 or more seconds and this happens many times during the night. This results in poor sleep and recurrent transient falls in blood oxygen levels with many subsequent adverse physiologic responses, as well as symptoms in the daytime such as fatigue and sleepiness.

Types of Sleep Apnea

Obstructive Sleep Apnea (OSA)

This is the most common form of sleep apnea seen in the general population. During deep sleep, the throat muscles relax, predisposing the upper airway to closure. Narrowing at the back of the throat relating to facial anatomy, or a short fat neck with excess fatty tissue around the neck are important factors promoting upper airway collapse, hence the risk of developing OSA.

Central Sleep Apnea (CSA)

There is no obstruction in the upper airway but apnea is caused by a disruption of the brain signal to the respiratory muscles. CSA is often seen in patients with congestive heart failure or stroke.

Mixed Sleep Apnea:

It is a combination of central sleep apnea and obstructive sleep apnea.



Symptoms

- Snoring
- Feels unrefreshed on waking
- Morning headache
- Daytime sleepiness
- Poor concentration
- Cognitive impairment and intellectual deterioration etc.

If neglected, sleep apnea may be the indirect cause of other diseases like hypertension, heart failure, irregular heart-beat, ischemic stroke, or even sudden death.



High-Risk Groups

1. Elderly people
2. Obese individuals
3. Those with a small lower jaw or a short neck
4. Those with heart disease or those who had a stroke before
5. Premature babies have a higher risk of developing sleep apnea.

However, sleep apnea can affect individuals of any age group.



Diagnosis

The doctor will arrange different tests based on the symptoms. A sleep study/ polysomnography and another test will be needed to confirm the diagnosis of sleep apnea.

Treatment

Sleep Apnea is closely related to obesity and upper airway collapsibility. Therefore, it is important to improve or control these factors.

Weight Reduction

Appropriate dieting and exercise are both important to maintain an ideal body weight. This would help not only sleep apnea but also other obesity-related diseases, e.g. heart diseases, hypertension etc.

Continuous Positive Airway Pressure (CPAP)

This therapy utilizes a small machine that delivers low positive pressure continuously to the upper airways via a plastic tube attached to a close-fitting mask worn over the nose. During sleep, this keeps the upper airway open.

Oral appliances

These are small plastic devices placed in the mouth during sleep. They hold the lower jaw forward in relation to the upper jaw so that the upper airway will get opened up to a bigger size for better breathing without obstruction during sleep. These devices are only suitable for some people who suffer from OSA.

Surgery

Surgery aims at removing redundant tissues to widen the upper airway. Its effectiveness varies among individuals.

Other than the specific treatments of sleep apnea, should also:

- Avoid alcohol before going to sleep
- Sleep on the sides
- Stop smoking
- Control rhinitis symptoms or nasal obstruction etc.

Should you have any queries, please consult your doctor.

