

NADIRA GUNATILLEKE

o you snore at night and feel sleepy during the daytime? Are you overweight? You could be having Obstructive Sleep Apnoea (OSA) which puts you at high risk of developing diabetes, high blood pressure and dying of a heart attack or stroke.

Here are the excerpts from an interview conducted with Dr. Chandimani Undugodage on Obstructive Sleep Apnoea.

What is OSA?

Obstructive Sleep Apnoea is a condition where breathing is obstructed during sleep. This occurs as a result of the temporary closure of the upper airway that carries air to the lungs.

Obesity is the most common risk factor for the development of OSA.

What happens in OSA?

The airway that carries air to the lungs passes through the throat or the upper airway. When a person gains weight, there is a lot of fat deposited in the neck, which makes the upper airway narrow.

When a person is awake, the airway is kept open by the muscles of the throat. But when asleep, all muscles relax and the already narrow airway becomes even narrower. When air passes in and out through this narrow airway, it makes a noise, which is what snoring is. As the person goes into deep sleep, the muscles of the throat relax further and the airway becomes narrower; at one point, the airway completely closes; then there is no movement of air into the lungs and the person completely stops breathing. This is known as an "apnoea".

When this happens, there is no air/oxygen going into the lungs which results in low levels of oxygen in the blood, brain and other organs. When the brain senses that the person is not breathing, it immediately brings the person from deep sleep to light sleep, or completely wakes that person up. Then the airway opens out and the person starts to breathe again.

In those with OSA, this happens over and over again at night leading to many awakenings, with very little uninterrupted deep sleep. The next morning, the person feels fatigued and sleepy during the day. This can result in a loss of productivity during the day. Falling asleep, especially, while driving leads to road accidents.

An episode of Obstructive Apnoea where the throat closes during sleep is comparable to strangulation. Imagine, if someone strangles you, what will happen? You will panic; your heart rate and blood pressure will go up and you would be under a lot of stress. A similar situation occurs during an apnoea in OSA. It produces a stressful situation in the body.

The release of stress hormones into the blood leads to elevated blood pressure and blood sugar. With time this leads to the development of diabetes and high blood pressure

(hypertension).

There is also a higher risk of getting a heart attack, stroke, abnormal heart rhythms (arrhythmia) and dying suddenly while asleep (sudden cardiac death). OSA patients may also suffer from impotence. With time they become forgetful and there can be changes in their personality as well.

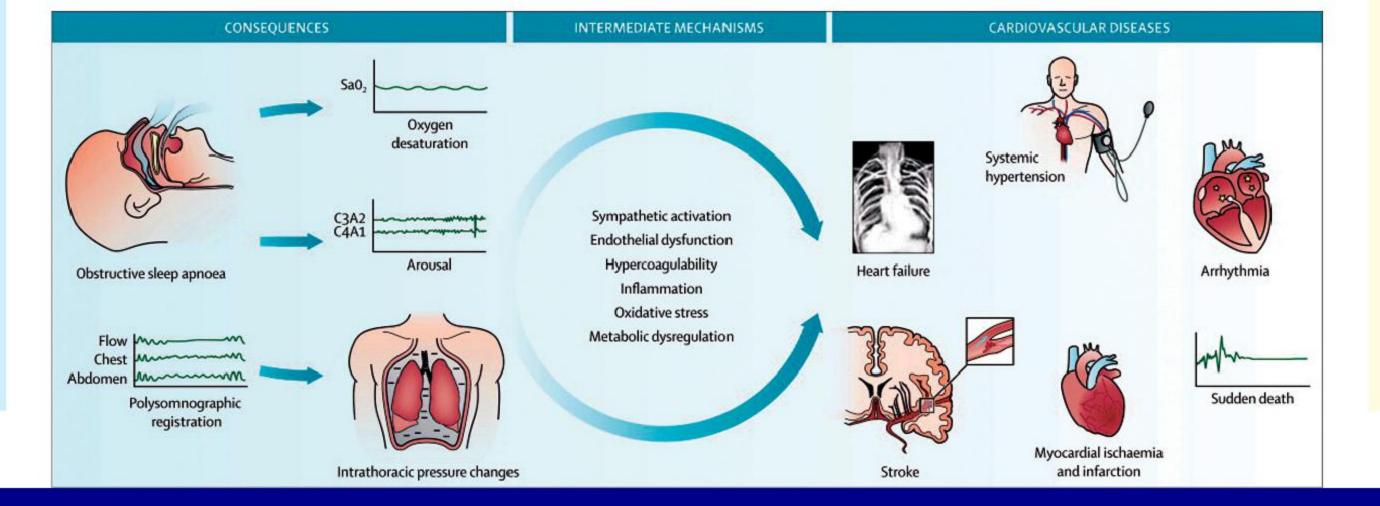
WORLD SLEEP DAY ON MARCH 18



Obstructive Sleep Apnoea

CESSATION OF RINTAKE DURING SLEEP

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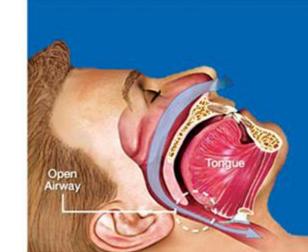
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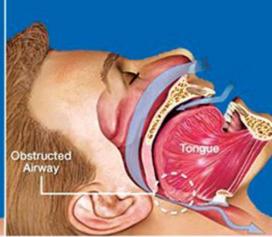
When should you suspect that you have OSA?

Snoring, daytime sleepiness, witnessed apnoeas at night, obesity, poorly controlled blood pressure, poorly controlled diabetes, new-onset stroke, the development of high blood pressure at a young age could signal that you have OSA.

How is OSA diagnosed?

If you feel you have OSA, talk to your doctor. He or she will refer you to a specialist. A comprehensive sleep assessment will be done to look for other sleep-related disorders. An overnight sleep study will be done to look for OSA. This is a simple test where your breathing, airflow, oxygen levels and heart rate are monitored and recorded. Test results will determine whether you suffer from OSA or not.





Non-Obstructed Airway

Obstructed Airway

How is OSA treated?

As OSA is about the closure of the throat during sleep, the treatment is aimed at keeping the throat open. The two main methods of treatment available in Sri Lanka are Continuous Positive Airway Pressure ventilation (CPAP) and surgery.

The CPAP is a small machine with a mask. The person has to wear the mask when going to sleep. The machine produces a jet of air which splints the airway open, without letting it close. Snoring stops immediately, in turn, making the person wake up refreshed in the morning.

Surgery or surgical therapy is aimed at making the airway larger and thereby stopping the airway from closing. There are many types of surgeries available.

In addition, weight reduction through diet and exercise is advised.

If you are interested to find out more about OSA, please visit the sleepbetter.lk web page developed by the Sleep Assembly of the Sri Lanka College of Pulmonologists which will be launched on March 18 on World Sleep Day.