

## EAR NOSE & THROAT

### Sleeping danger

Snoring is an annoying but common problem that in some cases can signal a serious condition known as sleep apnea.



Dr Paul Mok  
Ear Nose & Throat Surgeon

**My ENT Specialist**  
38 Irrawaddy Road  
#09-24 Mount Elizabeth Novena  
Singapore 329563  
Tel: 6397 5280/6535 8833 (24hr)  
www.myentspecialist.sg

**S**nororing can be more than a dreaded night time disturbance for a spouse. Chronic and severe snoring can be a symptom of a more dangerous problem called obstructive sleep apnea (OSA), a condition that creates dangerous breathing difficulties.

Normal snoring occurs when our muscles are relaxed in sleep. When we are awake, air passes through our nose and mouth towards the back of our tongue and down into our trachea or wind pipe, which is kept open by the upper airway muscles in our throat. In sleep however – especially in dream sleep – the upper airway muscle tone is inhibited by the central nervous system and there is a tendency for the airway to collapse partially, causing the abrasive rasping sound of a snore.

#### More than noise

In OSA, the airway collapse is sometimes complete, causing choking or a total disruption in breathing for a short period of time. This can last from several seconds to a few minutes. When we sleep, the brain centres that control breathing are also less responsive, leading to a reduced breathing (or hypoventilation). The tendency for the airway to collapse coupled with hypoventilation can cause our breathing to stop (apnea). During apnea, there is a gradual reduction of oxygen and a build-up of carbon dioxide in the body. This build-up of carbon dioxide – a waste product – causes several things to happen.

To begin with, the sufferer starts to breathe faster to get rid of the carbon



### ARE YOU AT RISK OF OSA?

Airway obstruction is more likely in people who are overweight, suffer from blocked noses, have a small face and jaw or have large tonsils. Those taking sedating medications or who consume alcohol at bedtime are susceptible to airway collapse. While people with OSA may be unaware of the problem, a spouse or family member is often more aware of the signs which include loud snoring, choking, getting up at night to urinate, unrefreshed sleep, excessive daytime tiredness, morning headaches, poor concentration, memory loss and loss of libido.

dioxide and to bring in fresh oxygen. This puts stress on the heart, which pumps harder to continue supplying oxygen to vital organs. Blood vessels constrict and blood pressure rises. This causes an arousal from deep sleep (REM sleep) into a lighter stage of sleep or wakefulness. This means that instead of the 20-25% of sleep time in REM sleep, a sufferer gets much less. This poor quality sleep can result in social, medical and even emotional problems. OSA also increases the risk of abnormal heart rhythms (cardiac arrhythmia) that can lead to sudden death.

Treatment for OSA is individualised and dependent on its severity, body weight, site of the obstruction and the patient's preference. Apart from weight management, other methods include the use of continuous positive airway pressure devices (CPAP), oral appliances and surgery to remove any obstruction in the throat. [🔗](#)