

When snoring isn't normal, IJN's Sleep Lab helps



How are sleep disorders related to the heart? The Institut Jantung Negara sees the connection and has set up a new sleep laboratory that helps patients improve their sleep.

We often laugh off snoring as an acceptable part of sleeping disturbances coming from loved ones. Little do we know that this "symphony" being played out at night is often a symptom of a more serious underlying health issue.

One of the things that IJN doctors have noticed is that 20% of their patients with hypertension have a sleep disorder. For heart failure patients, approximately 20% or 30% of them also have some degree of sleep disorder.

Snoring is one of the early signs of sleep apnea because it simply means the air passageway is obstructed.

Introducing IJN Sleep Lab

Seeing the rising trend of sleep disorders associated with heart disease, IJN has taken



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the step to set up the Sleep Lab for the benefit of patients who would like to have their sleep problems investigated.

There are currently not many sleep laboratories or sleep centres in Malaysia. IJN Sleep Lab fills this void in setting up what would be a suitable and complementary service alongside its existing core excellence in managing heart diseases. This gives IJN's patients the best holistic care and outpatients the option to investigate, have their sleep issues diagnosed and most importantly, treated.

Although there is a growing problem with sleep disorders which are usually related to respiratory or Ear, Nose, and Throat (ENT) disorders, sleep apnea is very much an associated condition with cardiovascular disease.

What is sleep apnea?

Sleep apnea occurs when a person stops breathing for a few seconds during their sleep. This reduction in breathing could occur between five and ten times during a person's sleep. Oftentimes, the person would wake up with a feeling of choking.

During the occurrence of sleep apnea, the muscles related to respiration relax. When that happens, it blocks the passage of air

which results in inadequate oxygen intake, causing the person to wake up choking.

In obese people, the soft fat around the neck also adds to the obstruction of the airways.

It is common for many people who have suffered through this to be aware that they had choked. However, some are so used to this pattern that they simply go back to sleep. Patients with sleep apnea are at a higher risk of developing problems such as hypertension, diabetes, and also heart failure.

IJN Sleep Lab puts patients' sleep to test

Dato' Dr. Azmee bin Mohd Ghaze is the Clinical Director of Heart Failure and Heart Transplant who leads the setting up and operations of the Sleep Lab. He and his team of doctors and nurses are in charge of putting patients to sleep, so to speak, in order to diagnose patients for sleep disorders, especially sleep apnea.

There are currently not many methods of screening for sleep apnea and other sleep disorders. Neither blood tests nor x-rays can detect sleep apnea. The only way to diagnose sleep apnea and sleep disorders is to go to a sleep lab.

Dr. Azmee's role is to supervise the sleep lab and sleep clinic where he will also monitor the tests being done. The patients will sleep overnight in the Sleep Lab.

While on the bed, they will be connected to an ECG monitor, a brain wave monitor, a blood pressure monitor and an oxygen saturation monitor. Their breathing patterns will be monitored. There is no medication given and the test is run by nurses who will record everything while the sleep test continues till the next morning.

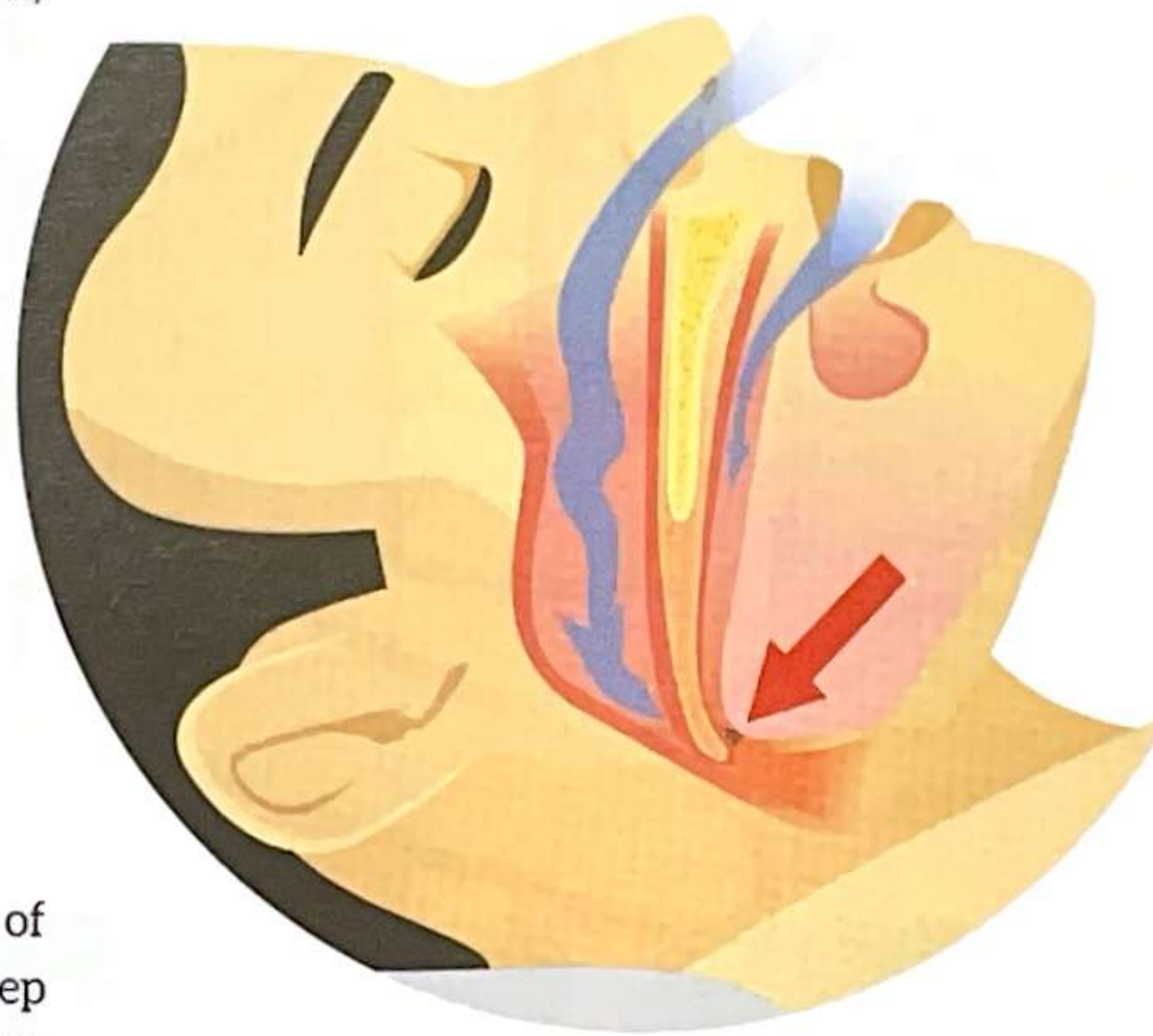
The monitoring of sleep is necessary because during the REM stage of sleeping, blood pressure and heart rate drop. At this moment, the body is completely relaxed. New cells are regenerated along with the release of growth and sex hormones. It's at this time that sleep apnea interrupts sleep.

In the morning, Dr. Azmee and his team of doctors will interpret the tests to diagnose a problem and start appropriate treatment.

The Sleep Lab's Sleep Apnea Treatment

The initial line of treatment recommended by doctors at the Sleep Lab would be lifestyle changes.

First, patients would be advised to lose weight if they're overweight. Second, they need to quit smoking and third, they need to exercise because exercise helps people sleep better.



If these first lines of treatment do not work, there's surgical and medical device intervention.

If there's a problem with the upper airways, like tonsillitis, surgery is required to correct this. But if there are no problems with the throat, the Sleep Lab will recommend the CPAP machine - a continuous pressure airway device. It's akin to wearing an oxygen mask and it gives positive pressure to the lungs and relieves the lungs while patients sleep with it at night.

Risk factors and signs of sleep apnea

The number one factor for developing sleep apnea is obesity. The second factor is smoking. Third, any upper respiratory problems like rhinitis or any ear, nose and throat (ENT) problems will also increase a person's risk of sleep apnea.

Women after menopause are also at risk. IJN's Sleep Lab doctors have also reported seeing child patients as young as 11 or 13 with sleep apnea.

One of the signs of sleep apnea is snoring.

Other signs are if a person is having problems concentrating during the day, experiencing irritability, depression or anxiety. Sufferers also report not feeling refreshed after a night's interrupted sleep.

Sleepapnea can cause hypertension, diabetes, heart failure and arrhythmia (irregularity of heart rate). Heart complications leading to arrhythmia can cause sudden death during sleep too.

Challenges of treating sleep apnea

Besides the lack of awareness for diagnosis, sleep apnea is not about taking medication. It requires a lifestyle change or weight reduction which can be difficult.

Second, the compliance with the CPAP machine (usage) is quite poor. A lot of people would buy the machine but they don't feel comfortable using it at night as there will be a tube connected to the machine.

Also, if patients need to travel, they would need a portable machine which is smaller, yet costly.

Many patients feel refreshed after using the machine. However, they have to continuously use the machine as the effects will stop if they discontinue its usage.

Doctors at Sleep Lab also warn that patients who are taking sleeping pills for sleep apnea will make it worse because it makes the entire body relax. In that state of sedation, patients may not wake up when they choke.

Importance of awareness

There are 15% to 20% of Malaysians who are already diagnosed with sleep apnea. A large number however, remain undiagnosed.

It is vital to increase the awareness among people and doctors, so patients can also ask questions about sleep apnea when they visit their doctors.

Furthermore, family members need to recognise what sleep apnea is so they can help alert the sufferer. Sleep apnea is at a sleep lab. IJN's Sleep Lab team is ready to help patients sleep better.