



Important Things to Know About Central Sleep Apnoea

- In Central Sleep Apnoea (CSA) breathing stops and there is a pause before there is an effort to breathe again.
- Loud snoring is not as common in CSA as in Obstructive Sleep Apnoea (OSA).
- There are many possible reasons for CSA.
- There are several possible treatment options for CSA, with CPAP being just one of them.

What is Central Sleep Apnoea?

While asleep, there may be pauses in breathing, which are called apnoeas. Up to 5 brief apnoeas an hour may be seen in normal adults. For people with central sleep apnoea (CSA), the apnoeas last longer and occur more frequently. The body does not make an attempt to breathe during these pauses. This is different to the more common **Obstructive Sleep Apnoea (OSA)**. Patients with OSA struggle to breathe against a blocked airway. For patients with CSA, the airway is not blocked, there is just a pause in breathing efforts.

About 10% of people with breathing problems during sleep have CSA. This affects the quality of sleep and they feel sleepy during the day. The person might also complain of **Insomnia** or other sleep problems. Loud snoring is not as common in CSA as it is in OSA.

What causes Central Sleep Apnoea?

The brain may be slow to respond to changes in oxygen and carbon dioxide levels in the blood when breathing slows down. This may occur in people who have had sleep apnoea for a long time. This is due to blunting of the breathing reflex. CSA may also be due to a slow

circulation from heart failure having an effect on the normal breathing reflex pathway. This causes a pattern of over-breathing and then under-breathing (periodic breathing) or stopping breathing. Other causes of this pattern of CSA include some drugs (e.g. narcotics such as morphine) or having cerebrovascular disease (e.g. a stroke). These affect the breathing control centres in the brain.

CSA can also be due to weakness of the muscles that make the lungs expand and contract, such as in neuromuscular disorders like polio. It can be also be caused by an abnormality in the shape of the chest wall or the lungs being too stiff. This can lead to under breathing, called hypoventilation.

CSA can disturb your sleep. It can also make your body retain carbon dioxide. This can lead to morning headaches or confusion.

Assessment of Central Sleep Apnoea

This requires a thorough evaluation of all the possible causes and also a **Sleep Study**. This is done by a **Sleep Specialist**.

What can be done about Central Sleep Apnoea?

- Drugs (e.g. narcotics) which may cause CSA may need to be reduced or stopped if you can. There are some other drugs which stimulate breathing. You might be able to try these.
- Positive airway pressure therapies can help many forms of CSA. **Continuous Positive Airway Pressure (CPAP)** may work. Adaptive servo ventilation is useful for periodic breathing. Sleep hypoventilation responds well to bilevel ventilatory assistance.
- Oxygen therapy at night may be beneficial.
- Where heart failure is a factor, treatment of this with medications is important.
- In rare cases a diaphragm pacemaker is used. This has been used in spinal cord injury patients or in congenital hypoventilation syndrome.

Where can I find out more information?

<http://www.nlm.nih.gov/medlineplus/ency/article/003997.htm>

This information is produced by:

Sleep Health Foundation

ABN 91 138 737 854

www.sleephealthfoundation.org.au

A national organisation devoted to education, advocacy and supporting research into sleep and its disorders

Sleep Disorders Australia

ABN 98 075 427 459

www.sleepoz.org.au

A voluntary group offering assistance and support to people and their families living with sleep disorders

Australasian Sleep Association

ABN 32 172 170 561

www.sleep.org.au

The peak national association of clinicians and scientists devoted to investigation of sleep and its disorders

Disclaimer - Information provided here is general in nature and should not be seen as a substitute for professional medical advice.

Ongoing concerns about sleep or other medical conditions should be discussed with your local doctor.

©Sleep Health Foundation, 2011



Sleep Health Foundation ABN 91 138 737 854

114/30 Campbell Street, Blacktown NSW 2148

T: +61 (0) 2 8814 8655 F: +61 (0) 2 9672 3884