



Using nCPAP with humidification slightly moistens the air from the blower, and may help to relieve some of these problems.

Some people find the mask uncomfortable. While the noise of the blower is not loud, some people also find this a problem.

HOW EFFECTIVE IS NCPAP?

The studies show that nCPAP is a very effective treatment during the time it is given. It reduces the number of episodes of OSA, reduces the symptoms caused by OSA, and improves quality of life.

The NHMRC review found strong evidence that:

- ★ nCPAP improves a range of symptoms for people with OSA. In particular, it reduces depression, and people feel they have better quality of life, and more energy and vitality. nCPAP may also improve cognitive performance – things such as concentration, thinking clearly, and memory.
- ★ For people with moderate or severe OSA (more than 20 episodes per hour while sleeping), nCPAP clearly reduces daytime sleepiness.

At least in the short term, nCPAP appears to reduce sleep disturbance and restore normal sleep “architecture” – that is, the patterns of light and heavy sleep that recur throughout the night.

The review also found that, for every ten people who start using nCPAP, up to three give it up after a time. It is not clear whether this is because of the side effects, or because people with milder OSA do not find it of sufficient benefit.

RECOMMENDATIONS

On the basis of this review, the NHMRC recommends that:

- ★ nCPAP should be tried for people with moderate or severe OSA – that is, people who have over 20 episodes per hour while asleep.
- ★ nCPAP may be considered for people who have OSA with 10 to 20 episodes an hour, and also have other symptoms or conditions such as daytime sleepiness, heart disease, stroke, or respiratory failure.

This pamphlet is based on *Effectiveness of Nasal Continuous Positive Airway Pressure (nCPAP) in Obstructive Sleep Apnoea in Adults*, a systematic review of the literature prepared by an expert working party of the National Health and Medical Research Council.

The review report was endorsed at the 135th Session of the NHMRC, 29 February 2000 and re-issued at the 160th Session of the NHMRC, 8 March 2006.

The report is available on the NHMRC website at www.nhmrc.gov.au

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obstructive **SLEEP APNOEA** and nasal continuous positive airway pressure treatment (nCPAP)

If you need more information on OSA or nCPAP please contact your doctor or health care worker

WHAT IS OBSTRUCTIVE SLEEP APNOEA?

Apnoea means brief spells of ten seconds or more when breathing stops.

Obstructive sleep apnoea (OSA), as the name suggests,

- ★ occurs during sleep, and
- ★ is caused by an obstruction – a physical blockage in the throat. The person is trying to breathe, but the air can't get to the lungs.

The blockage occurs when the muscles of the throat relax and sag inwards during sleep. After some seconds, the lack of oxygen rouses the person and breathing starts again.

This cycle happens again and again through the night – people with severe OSA may have up to 50 or 60 episodes an hour.

WHAT ARE THE EFFECTS OF OSA?

OSA can have a major impact on quality of life. People wake up tired, and they remain tired throughout the day. They may have difficulty concentrating and thinking clearly. Memory can be affected, and some people have mood changes such as depression.

People with OSA are more likely to have accidents on the road or at work. It has also been suggested that they are at higher risk of heart disease and stroke, but the research evidence is not clear on this.

WHO GETS OSA?

OSA is more common in men, in older people, and in people who are obese. It affects about four percent of middle aged men and two percent of middle aged women, to a degree that leaves them feeling sleepy during the day. Children can also be affected by OSA.

DO I HAVE THIS CONDITION?

Many conditions cause similar symptoms of tiredness and poor concentration. Your doctor will help you distinguish whether you have OSA. Sleep studies are currently the best way to determine whether you have OSA.

- ★ Obstructive sleep apnoea – OSA – is a common condition among adults, particularly middle-aged and older people. Nasal continuous positive airway pressure – nCPAP – is the treatment most often used.
- ★ The National Health and Medical Research Council has reviewed the published evidence on nCPAP, to clarify who can benefit from it, and to make clear recommendations on its use.
- ★ This pamphlet is based on that review and is intended for people before they are referred to participate in a sleep study.

WHAT TREATMENTS ARE AVAILABLE?

Nasal Continuous Positive Airway Pressure – nCPAP – is currently the best treatment for most people with moderate or severe OSA. It is widely used and relieves many of the symptoms of OSA in the short term but its long-term effectiveness has not been proven.

If you have OSA, you may also be advised to lose weight, and/or reduce your alcohol intake to reduce the risk of relaxed throat muscles closing in and blocking the airway.

Other treatments include medication, appliances in the mouth to keep the airway open, or surgery to the mouth and throat.

WHAT IS NCPAP?

nCPAP involves wearing a small mask over your nose while you sleep. The mask is held in place with straps.

A hose connects the mask to a small air blower, which sits beside the bed and delivers a constant, gentle stream of air. This raises the air pressure slightly in the nose and throat, and keeps the throat open.

ARE THERE SIDE EFFECTS?

nCPAP has no serious side effects, but mild side effects are common. These may include a dry and irritated nose, mouth and throat, sore eyes, nasal congestion, or headache.