
Welcome to the Acurest newsletter- *sleep.energy.life!* This newsletter will keep you up to date with the latest developments in the research and treatment of sleep apnoea and will provide you with hints and tips to help you continue with your CPAP therapy.

9th World Congress on Sleep Apnoea:

In March, Acurest Director Scott Coulter travelled to Seoul, South Korea for the 9th World Congress on Sleep Apnoea, a gathering of about 1,500 of the top scientists, doctors, surgeons and industry representatives from around the world. The latest equipment and techniques for the treatment of sleep apnoea were described, discussed and debated. We can rest assured that Australians were well represented and that we are on a par with the rest of the world in terms of treatment and research.



A magic pill ?

The Holy Grail of pharmacological sleep research is a pill that can cure or treat obstructive sleep apnoea (OSA). Significant research is being conducted in many universities and research institutes around the world trying to find the magic pill. While there is some progress in finding existing drugs that have an effect on some of the symptoms and causes of OSA, the complexity of the upper airway makes finding a single drug treatment almost impossible. There are twenty muscles in the upper airway, all of which play a role in breathing, eating and talking. Any drug treatment which works upon these muscles to maintain tone during sleep would also cause them to work differently when breathing, eating and talking. The search continues...

Paediatric treatments?

It is the structure of the upper airway that results in the development of OSA. Professor Christian Guilleminault of Stanford University's Centre For Excellence in Sleep Disorders suggests that early recognition of small airway spaces caused by a small jaw and/or a high

narrow palate can be corrected using special dental devices making the development of OSA less likely. He has also shown that many of the facial and airway structures of parents are passed along to children, meaning that if you have OSA there is a good chance that your children could also develop it. A correction done over several weeks during early jaw development could avoid the development of OSA. Guilleminault also states that "chronic snoring in children is NEVER normal". Worth thinking about...

Implants?

Some success is being seen with implants in various muscles in the upper airway. An American research team has used a thin membrane which changes shape when a small electrical charge is run through as an implant in the muscles which constrict the upper airway. At night, the electrical charge is switched on remotely and the membrane supports the airway and holds it open, effectively preventing obstructions. Recently conducted animal trials of the membrane have shown some success and human trials are scheduled in 2011...

Sleep facts:

- After 18 hours of being awake, a driver has the same reaction time as someone with a blood alcohol concentration of 0.05.
- After 21 hours of being awake, a driver has the same reaction time as someone with a blood alcohol concentration of 0.08.

Interesting research about CPAP and Sleep Apnoea:

Impact on Bed Partners:

“In addition to the expected significant benefits reported by patients receiving CPAP, bed partners also reported significant improvements in [daytime sleepiness], in addition to measures of anxiety, role limitation due to physical problems, role limitation due to emotional problems, social functioning, mental health, and energy/vitality.”

Source: Liam S. Doherty, MB, John L. Kiely, MD, Geraldine Lawless, and Walter T. McNicholas, MD, FCCP (10.1378/chest.124.6.2209 CHEST December 2003 vol. 124 no. 6 2209-2214)

Cardiovascular Risk:

“OSA treatment was associated with a cardiovascular risk reduction of 64% independent from age and pre-existing cardiovascular comorbidities. OSA treatment

should be considered for primary and secondary cardiovascular prevention, even in milder OSA.”

Source: *American Journal of Respiratory and Critical Care Medicine* Vol176.pp.1274-1280,(2007)

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Talk to your GP:

“There are a variety of treatments available for patients with OSA. Successful treatment involves encouraging patient compliance with CPAP or oral appliances. Primary-care physicians [General Practitioners] play a crucial role in recognizing this disorder and ensuring the best possible outcome through support and education.”

Rosenberg R, Doghramji P.

Journal of Advanced Therapies 2009 Apr 3.

Hints and tips:

Group behavioural therapy has been shown to improve compliance with CPAP therapy at the point at which CPAP is first prescribed. Some sleep clinics run group sessions so that new users can mutually support each other as they get used to treatment, with great results! For seasoned CPAP users, the benefits of sharing insights with and supporting other users acts as a reminder of the importance of staying with the treatment.

Most of us know other people who use CPAP. Offer support to them by asking about how the treatment is going for them and don't be afraid

to ask for help yourself. CPAP can be a confronting treatment and your experience can help others to stay with it and their experience could help you too.

If this idea is not going to work for you, consider trying one of the numerous on-line chat forums, such as www.cpaptalk.com or www.sleepguide.com/forum. Both of these are American-based, but the issues faced by CPAP users are universal...

We would love to hear any tips or hints you have! If you are willing to share your ideas, send us an e-mail at support@acurest.com.au.