

RESEARCH BULLETIN: October 2006 **Adelaide Institute for Sleep Health (AISH)**

The institute provides a multidisciplinary approach to diagnosis, management and research of sleep disorders such as sleep apnoea, insomnia and restless leg syndrome/periodic limb movement disorder



AISH is recognised around the world as a leading centre for clinical and basic *RESEARCH*, with special emphasis on sleep breathing disorders and insomnia. Our research projects are funded by the Australian National Health and Medical Research Council, The Flinders University, Lions Foundation and Industry

SOME CURRENT AISH RESEARCH PROJECTS

Obstructive Sleep Apnoea and Daytime Functioning

This important new study will examine how OSA affects daytime functioning. Patients will be assessed using tests of reaction time and a driving simulator. We aim to discover how OSA severity affects performance, as well as examining vulnerability to sleep restriction and alcohol.

Effects of CPAP treatment on cardiac risk markers during sleep

This study will investigate how blood-clotting and heart rates change during sleep in OSA patients. This will allow us to determine if OSA has acute or short term negative effects on the cardiovascular system during sleep, which may lead to adverse cardiovascular events during sleep (e.g. stroke).

Lung volume and Diaphragm position: changes at sleep onset

This new study will evaluate lung volume and diaphragm position changes at sleep onset in OSA. We believe that OSA patients show a greater fall in lung volume, and greater upwards displacement of the diaphragm thus decreasing body oxygen and making the throat more vulnerable to collapse.

Home diagnosis and management of Sleep Apnoea

A new study to start in 2007 will look at new and simplified ways to diagnose and manage sleep apnoea in general practice, using the expertise of GPs and community nurses and simplified home sleep studies. The findings of this important research have the potential to reduce waiting lists and make the management of OSA simpler, more cost-effective and easier for everyone.

A new device for stabilising respiratory control during sleep?

AISH has developed a prototype device for preventing low carbon dioxide levels and low breathing conditions following periods of increased breathing such as occurs with brief arousal and some abnormal patterns of breathing. This study will examine the effect of this device in OSA.

OUR RESEARCH VOLUNTEERS

Our patients, and healthy members of the local community, regularly volunteer for our important research projects. We greatly appreciate their interest and enthusiasm, and we may ask you if you wish to help.

WE VALUE YOUR PARTICIPATION, AND HOPE THAT YOU CAN BE INVOLVED.

Adelaide Institute for Sleep Health
Repatriation General Hospital
Daw Park, SA 5041
Tel: (08) 8275 1187

