

SAVE - Sleep Apnea Cardiovascular Endpoints Study

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THE
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INSTITUTE
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Facts

- According to the World Health Organisation (WHO), one in five adults in China has a cardiovascular disease (CVD). In 2010, CVD accounted for 18% of all deaths in rural areas and 21% in urban areas.
- The number of annual cardiovascular events is predicted to increase by 50% by 2030 based on population aging and growth alone in China. However trends in blood pressure, cholesterol and diabetes and smoking would increase the number of annual cardiovascular events by an additional 23%.
- 10% of middle-aged men and 4% of middle-aged women have significant OSA. In China, the prevalence of OSA among adults is around 4%. Increasing age, obesity and male gender are the most recognised risk factors for OSA.

Partners:

The George Institute, Australia
Adelaide Institute for Sleep Health, Australia
Flinders University, Australia
The Shanghai Institute for Hypertension, Ruijin Hospital, China
Harvard Medical School, USA
State Key laboratory of Respiratory Disease, Guangzhou Medical College, China
Australasian Sleep Trials Network, Australia

Supporters:

National Health and Medical Research Council, Australia
Philips Respironics
ResMed

Contact

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Background:

- CVD is the leading cause of death in the world.
- Obstructive Sleep Apnea (OSA) is a common condition characterised by varying degrees of repetitive episodes of upper airway obstruction (apnea) or narrowing during sleep, loud snoring, and daytime sleepiness.
- OSA sufferers are typically overweight, male snorers. With the increasing prevalence of obesity there is a corresponding increase in OSA. OSA has been shown to reduce quality of life and increases blood pressure and road accident rates. Currently most cases go undetected.
- SAVE is the first large scale, international, long term study that will answer the question—does treating OSA patients with continuous positive airway pressure (CPAP) prevent CVD?

Aims:

- To determine if CPAP treatment will reduce CV events in patients with established cardiac or cerebral CVD and co-occurring moderate-severe OSA.

Methods:

- SAVE is a randomised, controlled trial of CPAP treatment plus standard care compared to standard care alone, in 2717 high CVD risk patients with moderate-severe OSA.
- The study will determine the effects of CPAP treatment over a 2-7 year follow-up period of new cardiovascular events, including myocardial infarction, stroke and cardiovascular death.
- The study is being conducted in China, Australia, New Zealand, India, USA, Spain and Brazil.



Impact:

- OSA is highly prevalent and amenable to cost-effective treatments.
- If it can be established reliably that OSA is a significant cause of cardiovascular events, and premature death and disability, screening for OSA would then routinely become part of cardiovascular care and integrated within public health campaigns aimed at reducing cardiovascular morbidity and mortality.
- There is currently relatively little community awareness of OSA in China. Additionally access and experience with continuous positive airway pressure treatment is limited. Thus the vast majority of cases in China currently go undetected and untreated.

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