

## \*\*\*Media release\*\*\*

## Zap of electricity brings an end to sleepless nights

Sleepless nights are a thing of the past for Annette Rowlands. The 50-year old had endured 12 years of poor sleep that left her feeling exhausted and unable to cope.

Mrs Rowlands had suffered from obstructive sleep apnoea, said Dr Maree Barnes, Austin Health sleep specialist.

"While sleeping, Annette's tongue and palate were sucked against the back of her throat so that she could not breathe," said Dr Barnes. "During her sleep study we measured that this happened for at least 10 seconds, 40 times each hour. Each time, Annette briefly awoke. She was unable to enter into deep, restful sleep."

In July, Mrs Rowlands was surgically implanted with a device that sends a zap of electricity to her tongue so that it moves forward and opens her airway.

The device is a little smaller than an iPod Nano and sits just under her collar bone. It is connected to two sensor leads that run under her skin and monitor her breathing. A stimulator lead is placed under the skin under her chin and is attached to the device.

Mrs Rowlands uses a controller to start and stop the device, programming it to turn on 30 minutes after she falls asleep. During each breath, the system sends an electronic signal to her tongue nerve via the stimulation lead. This causes her tongue to move and open the airway, allowing her to breathe. Once asleep, Mrs Rowlands is not aware the device is operating and remains asleep.

"When I heard about the trial I was desperate," said Mrs Rowlands. "I had forced myself to keep going for so long but I just couldn't cope anymore. I was so tired that if I sat down for a moment, I'd fall asleep."

Dr Barnes says that untreated sleep apnoea can be harmful. "Besides the inability to function well and enjoy life, sleep apnoea may cause high blood pressure."

"Since I've been able to sleep I feel absolutely wonderful," Mrs Rowlands said. "I have a lot more energy and I feel healthier. People say that I look better and I have lost the bags under my eyes."

"Although this is a brand new technology, nerve stimulation has been used extensively in many parts of the body for a long time," said Dr Barnes.

Mrs Rowlands is one of 18 Australians who are expected to benefit from the device during the trial. So far eight patients have been implanted at the Austin Hospital. The device, known as the Apnex Hypoglossal Nerve Stimulation (HGNS<sup>™</sup>) System is manufactured by US-based company Apnex Medical Inc.

For more information about this trial, please call the Austin Hospital Switchboard on 03 9496 5000.