

Sleep Apnea Implant Device

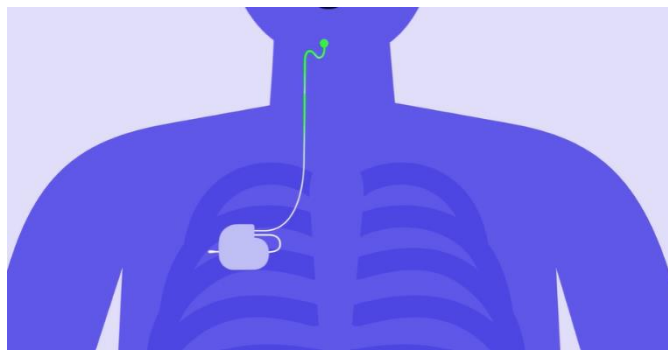
▪ What is Sleep Apnea?

Obstructive Sleep Apnea (OSA) is a very common and serious condition that affects millions of patients worldwide. It occurs when the muscles in the airway relax during sleep resulting in airway narrowing depriving the reach of oxygen to the brain.

It can result in high blood pressure, strokes, heart failure and heart attacks, poor performance in everyday activities and many more dangerous side effects.

▪ Sleep Apnea Implant Device:

The implant device provides therapy through the stimulation of neurons (neurostimulation) and is designed to deliver stimulation to tongue muscles by controlling the upper airway flow and therefore reducing and eliminating sleep apnea. It is surgically implanted system performed by ENT surgeon.



<https://www.inspiresleep.com/learn/>

▪ Main Elements:

- OSA patients
- Doctors and ENT surgeons

▪ Requirements:

- I. The device should detect the breathing of the patient.
- II. The device should be able to send simulations to tongue muscles (hypoglossal nerve).
- III. The device should be controlled by a remote control.

References:

<https://www.livanova.com/en-us/home/obstructive-sleep-apnea>

<https://www.inspiresleep.com/learn/>