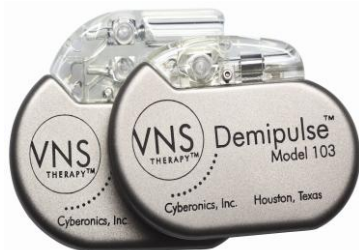


## Vagus Nerve Stimulation (VNS)

The vagus nerve stimulator may be used in children who are resistant to medication, who are not suitable for surgery, and for whom the ketogenic diet has been tried.

The vagus nerve transmits between the body and the brain. The left vagus nerve can be stimulated by a programmable device, which looks similar to a cardiac pacemaker.



This is implanted beneath the skin in the chest, either below the collarbone or in the armpit. A second small incision allows the wires from the device to be wrapped around the vagus nerve in the neck.

This procedure is carried out in hospital under general anaesthetic. About two weeks after the VNS has been implanted, the device will be switched on.

The device will deliver intermittent stimulation at a pre-programmed rate over 24 hours, day and night, (for example 30 seconds 'on time' and 5 minutes 'off time') The timing is variable and can be

adjusted by trained staff.

The device will deliver intermittent stimulation at a pre-programmed rate over 24 hours, day and night, (for example 30 seconds 'on time' and 5 minutes 'off time') The timing is variable and can be adjusted by trained staff.

The device may also be activated by the child or carer placing the special VNS therapy magnet over the device for about a second - if applied at the onset of a seizure; this may interrupt a seizure or reduce its severity.

Side-effects are usually mild and can almost always be resolved with an adjustment of the settings to reduce the stimulation current.

Side-effects can include hoarseness, throat discomfort, coughing and swallowing difficulties but these may be intermittent and often settle over time.

Any improvement in seizure control may not be seen until 6 to 12 months after the device has been fitted, with the full effect taking up to 18 months.

The battery life of the device varies between 5 and 10 years, with the newer models having a longer battery life. When the battery needs replacing, the VNS device can be replaced during a small operation. This can be done under local, or more often, a general anaesthetic.

For more information on the vagus nerve stimulator visit [www.cyberonics.com](http://www.cyberonics.com).

Better futures for young lives with epilepsy

Better futures for young lives with epilepsy

Better futures for young lives with epilepsy