Reza Band® for laryngopharyngeal reflux

TECHNOLOGY

The Reza Band® is a wearable technology designed by Somna Therapeutics and distributed by GDS Medtech Ltd., to reduce acid reflux into the throat and lungs and its associated symptoms.

The Reza Band® is a non-invasive, non-surgical and non-pharmacological device that is worn by patients whilst sleeping. It consists of a cushion, a comfort band, a frame, comfort dial and clasp.

It is worn on the neck around the upper oesophageal sphincter and applies pressure to the cricoid cartilage. This increases the luminal pressure within the upper oesophageal sphincter and thereby stops the regurgitation of stomach contents above the sphincter. By stopping acid reflux, the company state the Reza Band® reduces the accompanying symptoms. The Reza Band can be fitted by a clinician in an outpatient setting, within ten minutes.

The Reza Band® received a CE mark in February 2014. UK launch is anticipated for late 2015.

POTENTIAL FOR IMPACT

Patients suffering from laryngopharyngeal reflux have a dysfunctional upper oesophageal sphincter. A poorly functioning sphincter can result in regurgitation of stomach contents into the larynx, pharynx and lungs. This happens most often at night while sleeping supine. Acid reflux into the throat and lungs causes symptoms including chronic throat irritation and cough, hoarse voice, difficulty swallowing, postnasal drip, sleep disruption and pneumonia.
Management includes lifestyle changes including avoiding alcohol, caffeine, carbonated beverages and tobacco. These changes may have little effect in some patients, particularly those with the more severe disease state. Proton Pump Inhibitors are currently considered the first option for pharmacological treatment although this is unsuccessful in some patients. The risk also remains of other stomach contents passing through the upper oesophageal sphincter, resulting in damage to the pharynx, larynx and lungs. Surgical interventions are also available but are reserved for those with the highest severity of the disease.

The Reza Band® may serve as an alternative for patients that typically have a poor response to current standards of treatment. An innovative feature of the Reza Band® is its non-invasive approach to stopping the regurgitation of stomach contents from rising above the upper oesophageal sphincter. The company state patients have reported significant improvement within the first week of using the device, unlike pharmacological management, which can take as long as three months to determine effectiveness and may have side effects. By avoiding surgical intervention, patients may also benefit from avoiding the extended recovery time associated with such procedures.

The company state training to fit the device is simple and can be completed within a few hours. Additional medical or healthcare resources are not required and patients can be treated within an outpatient setting. If clinical and cost effectiveness can be demonstrated, the Reza Band® device may offer an additional option for patients with laryngopharyngeal acid reflux disease and is predicted to have an impact on the following domain(s) of the NHS Outcomes Framework (www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk):

- Domain 2 Enhancing quality of life for people with long-term conditions;
- Domain 3 Helping people to recover from episodes of ill health or following injury.

**EVIDENCE**

**PUBLISHED PAPERS AND ABSTRACTS**


Silvers SL. Nonrandomized prospective study of an upper esophageal sphincter (UES) assist device for treating laryngopharyngeal reflux. Otolaryngology Head and Neck 2014;151(1):44. [http://oto.sagepub.com/content/151/1_suppl/P44_2.short](http://oto.sagepub.com/content/151/1_suppl/P44_2.short)

**COMPLETED UNPUBLISHED STUDIES**

Vaezi MF, Silvers SL, Vakil NB et al. Prospective study of upper esophageal sphincter (UES) assist device for treating extraesophageal reflux.
Lay summary

The Reza Band® is a new device to treat acid reflux, where stomach acid rises back up into the mouth. The Reza Band® applies small pressure to the neck, stopping the acid from rising up towards the mouth. The developers say the advantage of the device is that it is an alternative way of treating the condition for those people where the current treatment options are not working.