

Electrical stimulation of the esophagus promising treatment for unresolved reflux symptoms

October 22 2012

Clinical evidence of the safety and effectiveness of electrical stimulation of a muscular valve in the esophagus demonstrates promising results in resolving symptoms of gastroesophageal reflux (GERD) and is being presented at the 77th Annual Scientific Meeting of the American College of Gastroenterology in Las Vegas, NV.

Three studies examined small numbers of patients who had a device implanted that uses low energy [electrical pulses](#) to strengthen a weak or dysfunctional lower esophageal sphincter (LES) which is the underlying cause of GERD or [acid reflux](#). The LES is the ring shaped muscular valve that keeps the acidic contents of the stomach from the esophagus, or food tube.

Two studies by investigators Michael Crowell, Ph.D., FACG of Mayo Clinic Scottsdale and Edy Soffer, MD, FACG of the University of Southern California looked at various endpoints including esophageal acid exposure, improvement in GERD symptoms, and reduction of use of acid-suppressing medications known as [proton pump inhibitors](#). In a study of 25 patients, the investigators found that 77 percent of patients reported either normalization or at least a 50 percent reduction in PPI use. At 12 months after the implant of the device, there was a statistically significant improvement in patients' scores on a scale measuring health-related quality of life for patients with GERD. The authors conclude, "[Electrical stimulation](#) of the lower esophageal

sphincter is effective for treating patients with GERD over long-term year duration." The authors reported relationships with the Netherlands-based EndoStim BV which manufactures the device.

In a separate and unrelated study, Arjan Bredenoord, MD and colleagues at the University Medical Center Utrecht in Rotterdam, The Netherlands, presented a study at ACG of eleven patients with refractory GERD symptoms with devices implanted in the LES. They found that ten of the eleven patients (91 percent) were able to discontinue PPI medications. Overall, their research revealed a statistically significant improvement in [patients'](#) GERD symptoms, as well as a trend in improvement in their esophageal pH.

Provided by American College of Gastroenterology

Citation: Electrical stimulation of the esophagus promising treatment for unresolved reflux symptoms (2012, October 22) retrieved 26 April 2024 from <https://medicalxpress.com/news/2012-10-electrical-esophagus-treatment-unresolved-reflux.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--