

ELECTRICAL STIMULATION THERAPY OF THE LOWER ESOGHAGEAL SPHINCTER IN TREATING GASTROESOPHAGEAL REFLUX DISEASE IN CHILDREN, OPEN LABEL PROSPECTIVE TRIAL

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BACKGROUND

Electrical stimulation therapy (EST) of the Lower Esophageal Sphincter (LES) is a new treatment for Gastroesophageal reflux disease (GERD) that has been used in adult patients, in this paper we describe the first three cases in children with GERD, treated with EST. This device improves the pressure of the LES without interfering with its relaxation. Our aim is to describe the fist three cases in pediatric population in the world with the use of ENDOSTIM, shows an alternative in the treatment of GERD by electrical stimulation.

METHODS Three patients with GERD, chronic pain, semi choking episodes, regurgitation that didn´t respond to proton inhibitors, abnormal esophageal PH , hiatal hernia less than 3 cm, Los Angeles grade C esophagitis by endoscopy, chronic esophagitis by acid reflux reported by pathology, abnormal pressures in esophaseal manometry

RESULTS. We included 3 patients with GERD with the following criteria, ph , manometry endoscopy follow up 1, 3, 6, 12 postsurgical month

Patient 1, comorbidity, MODY diabetes, Bud Chiari syndrome , baseline, symptoms daily, PH Demeester index 68.5, manometry 14.7 mmHg, endoscopy (esophagitis) grade C, medication daily, 12th month followup symptosm absent, PH Demeester index 9, manometry 23 mmHg, endoscopy normal, medication none.

Patient 2, comorbidity, down syndrome , heart disease corrected at birt, low weight, baseline, symptoms daily, ph 95% reflux cough & blench, manometry 14.7 mmHg, endoscopy (esophagitis), grade C, medication daily, 12th month symptoms absent, ph 0% reflux, manometry 16 mmHg, endocopy normal, medication none.

Patient 3, comorbidity, down syndrome heart disease corrected at birth, lox birth, diaphragmatic paralysis corrected, low weight, recurrent pneumonias, baseline symptoms daily, ph 95% reflux, cough, manometry 14.7 mmHg, endoscopy (esophagitis) grade C, medicatuon daily, 6th month, symptoms absent, ph 0% reflux, manometry 16 mmHg, endoscopy normal, medication none.

DISCUSSION

The results show that electrical stimulation of the LES can improve symptoms of GERD, reduce esopagheal acid exposure by augmenting esophageal sphincter pressures and reduce the need for PPI medication without Gastro esophageal side effects typically seen with other antireflux procedures that involve mechanical alteration of the gastroesophageal junction.

BIOGRAPHY.

Dr. Rodrigo Hipolito Cifuentes, studied pediatrics at the Hospital Infantil de Mexico "Federico Gomez", pediatric surgery and endoscopy at Centro Medico Nacional 20 de Noviembre , he is head of service of pediatric endoscopy at hospital infantil privado, he is the first to use endoscopic capsule in children.

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