

Electrical Stimulation (ES) of the Lower Esophageal Sphincter (LES) to address Gastroesophageal Reflux Disease (GERD)



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Introduction:

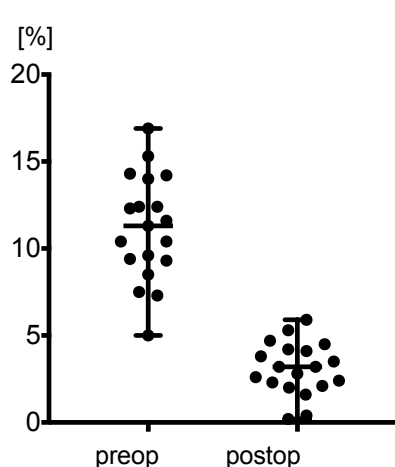
- Fundoplication:
 - effective treatment option for GERD with good long-term efficacy
 - associated with adverse effects, mainly dysphagia, pain, gas-bloat syndrome and diarrhea
- ES of LES possible alternative as it lacks those complications and improves motility

Methods:

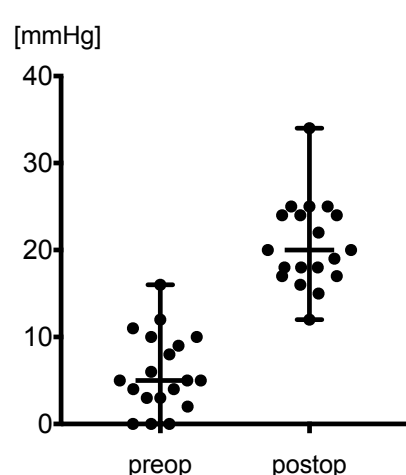
- Prospective analysis of patients receiving ES (Endostim®) of LES for GERD without prior gastric surgery, hiatal hernia >3cm, and follow-up of at least 6 months btw 01/13 – 10/16
- Laparoscopic placement of electrodes, posterior hiatoplasty, ES with 20 Hz, 215 μ s, 3 – 8 mA in multiple 30-minute sessions
- follow-up with daily symptom and medication diaries, 24h-impedance-manometry after 6 months and gastroscopy after 12 months

Results:

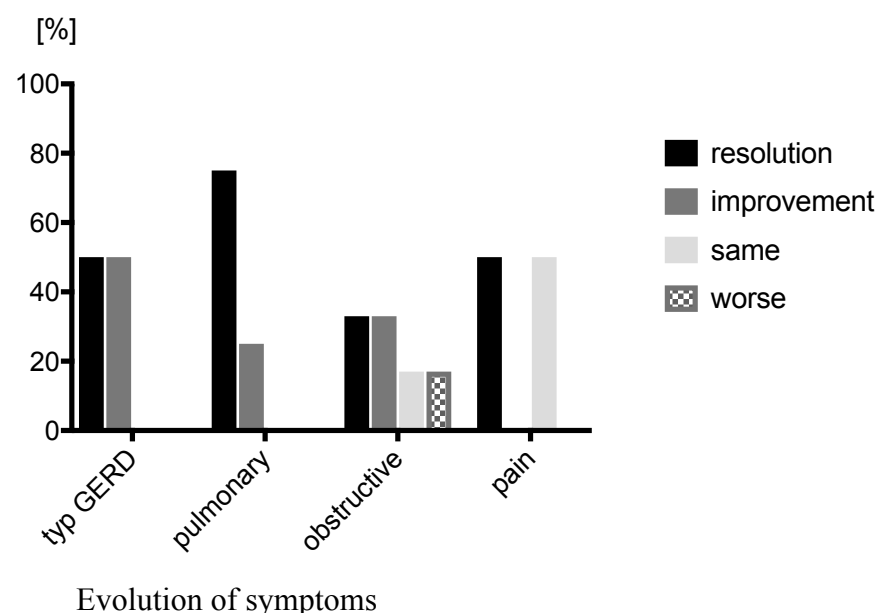
- 19 patients, median age 43 years (min 26 – max 72), 9 female (47%)
- peri- or postoperative complications: hematoma 1 (5%)
- Median follow-up 12 months (6 – 48, no patient lost to follow-up)
- Use of PPI 100% preop to 16% postop



Esophageal acid exposure, normalization in 15 pat (79%)



Resting LES pressure, normalization in 15 pat (79%)



Conclusion:

- ES of LES leads to enhanced LES pressures and decreased esophageal acid exposure
- safe and effective treatment for GERD without typical adverse effects of traditional antireflux surgery