

Intragastric Pressure Sensing Endoscope

Available for Exclusive Licensing

MCW C2217

Description

Gastroesophageal reflux disease (GERD) is a common GI complaint. A cause of GERD is a malfunction of the lower esophageal sphincter (LES). The LES acts as a barrier against reflux of gastric contents into the esophagus. In endoscopic investigation, the physician introduces an endoscope to view the mucosal layer of the GI tract. Current endoscopy techniques do not assess the competency of the LES to protect the esophagus.

Problem Solved

A simple device invented by physicians at the Medical College of Wisconsin and University of Southern California provides a dual-purpose endoscope and pressure sensor that allows for real-time assessment of LES competency under varying intragastric air pressure which is adjusted by air insufflation catheter integral to the device.

Initial Testing Results

Feasible? Yes Gastric Pressure in recordable Range? Yes Tolerability: Excellent. Design: more resilient gauge is needed

"This approach will open a new field of research and a new clinically relevant field for addressing some of the chronically lingering patient complaints." Dr. Reza Shaker, Inventor pf the Shaker Exercise.

Key Advantages

- Quantitative assessment of LES is diagnostic and differentiating
- Simple device means low upfront design and manufacturing costs

Stage of Development: Prototype tested on humans

Intellectual Property Status: US Patent filed December 2021, Foreign rights available

Lead Inventors



Reza Shaker, M.D. Associate Provost for Clinical and Translational Research Director, Digestive Disease Center Gastroenterology and Hepatology MCW



Anisa Shaker, M.D.

Assistant Professor of Medicine Department of Medicine USC **Contact** Kevin Boggs 414-955-4381 kpboggs@mcw.edu