



# Innovation in Total Reflux Monitoring



## It's time to clear up the confusion.

Selecting the appropriate Reflux Monitoring Test for your patients is more important than ever.

For optimal diagnostic performance, trust Impedance/pH probes manufactured only by Sandhill Scientific

### ComforTec® Z/pH probes—a perfect fit for every clinical application:

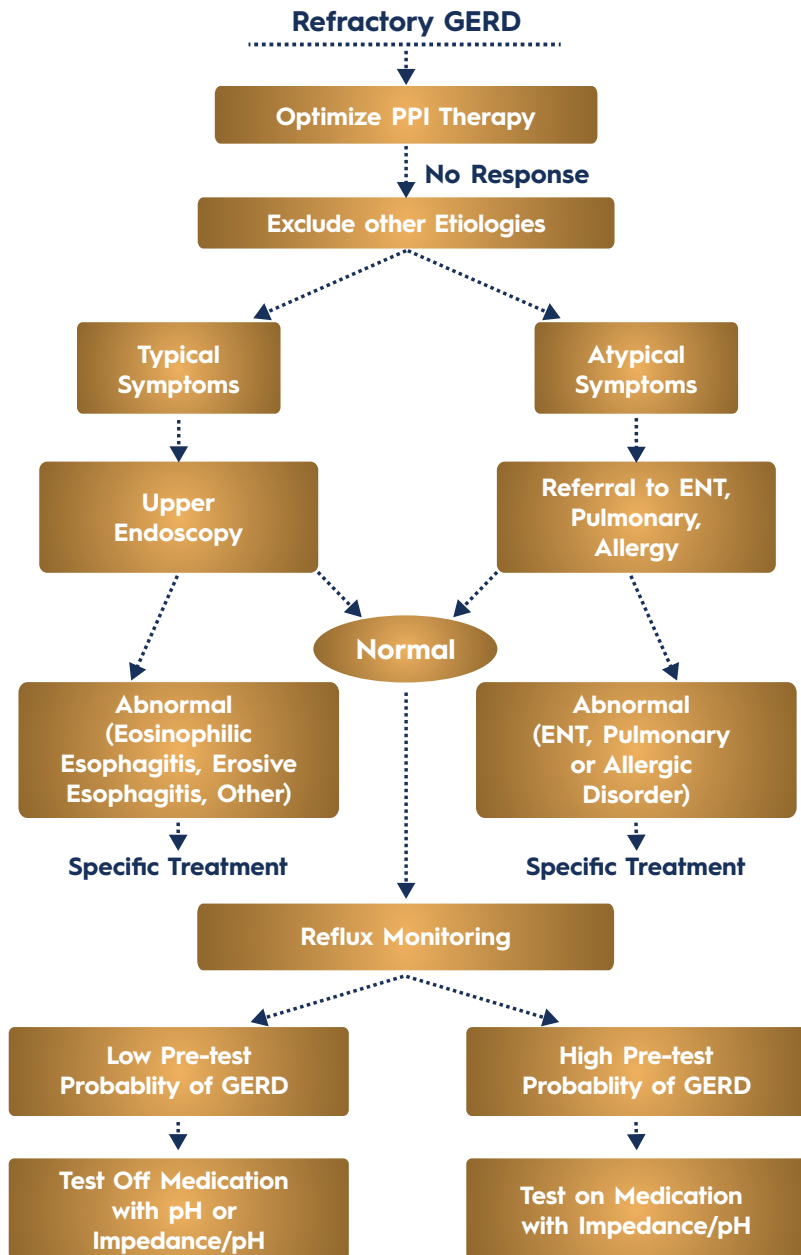
- Enhanced patient comfort
- Optimal ease-of-use
- The widest range of standard configurations to meet your clinical need
- Small diameter for easy insertion
- Made from specially-formulated materials that soften in response to body temperature
- High-quality, latex-free, single-use
- 100% guaranteed performance
- A variety of esophageal lengths to accommodate adult, pediatric and infant patients
- Single branch LPR probes with both distal and proximal pH and impedance sensors to identify and characterize acid and nonacid LPR



All impedance/pH probes, recorders and supplies are made to Sandhill's exacting specifications. Never settle for imitations.



The AirFlo™ Sphincter Locator simplifies sphincter location when used in combination with ComforTec® infused pH and Z/pH Probes.



**Algorithm for the evaluation of refractory Gastroesophageal Reflux Disease (GERD), ENT (Ear, Nose & Throat), PPI (Proton Pump Inhibitor)<sup>1</sup>**



### ZepHr impedance/pH recorder—small and mighty G.I. diagnostics:

- Small size and weight
- Upright and recumbent indicators for easy viewing, easy interface
- SD Card for quick, effortless data download
- Only needs 2 AA batteries and includes a cleanable carrying case

Reflux monitoring, whether pH or impedance/pH, has advantages and drawbacks. The recently updated ACG *Practice Guidelines for Diagnosis and Management of GERD*<sup>1</sup> provide a simple, yet comprehensive reflux monitoring test selection algorithm.

### What to know about reflux monitoring.

- While an empiric PPI trial remains the first-line diagnostic test in suspected GERD patients, nearly 40% of these patients on PPI treatment continue to experience symptoms.<sup>2</sup>
- A second-line diagnostic test, upper endoscopies are appropriate to determine the extent of esophageal damage. However, over 70% of these are negative.<sup>3</sup>

Today's clinicians have additional diagnostic tools available to help them understand these endoscopy-negative patients with persistent symptoms.

### When to choose impedance/pH monitoring?

Patients on PPIs who continue to experience symptoms such as cough, heartburn, regurgitation and chest pain are often difficult to diagnose using traditional pH monitoring. These PPI-refractory, endoscopy-negative patients are optimal candidates for impedance/pH reflux monitoring. In fact, physicians using only acid pH monitoring may miss up to 35% of patients with non-acid reflux.

- The sensitivity of pH-only monitoring in patients with endoscopy-negative reflux symptoms is <71%.<sup>1</sup>
- According to a consensus study by Sifrim et al, when impedance testing is added to pH monitoring, the sensitivity of reflux monitoring approaches 90%.<sup>4</sup>



## Sandhill University—training and education at a higher level.

Providing great products is just the first step in a long-term relationship with our customers. We believe that training and education are the key components to even the best equipment, enabling you to provide outstanding patient care.

That's why at Sandhill University we have developed a comprehensive set of options to meet your needs, including:

- Sandhill University/Denver
- Sandhill University/Online
- Webinars
- SuperVISION MD
- Cybercoaching



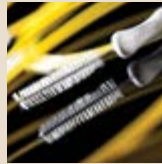
**Manometry Testing**



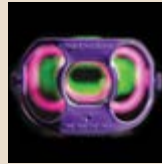
**Reflux Monitoring**



**Esophageal Dilators**



**CleanFreak® Cleaning Products**



**Endoscope Care & Accessories**

### References

1. Philip O. Katz, Lauren B. Gerson and Marcelo F. Vela, Guidelines for the Diagnosis and Management of Gastroesophageal Reflux Disease. Am J Gastroenterol advance online publication, February 19, 2013; doi:10.1038/ajg.2012.444.
2. Mainie I, Tutuian R, Shay S, et al. Acid and non-acid reflux in patients with persistent symptoms despite acid suppressive therapy: a multicentre study using combined ambulatory impedance-pH monitoring. Gut 2006;55:1398-1402.
3. El-Serag HB. Epidemiology of non-erosive reflux disease. Digestion 2008;78(Suppl 1):6-10.
4. Sifrim D, Castell D, Dent J, et al. Gastroesophageal reflux monitoring: review and consensus report on detection and definitions of acid, non-acid, and gas reflux. Gut 2004;53:1024-31.

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