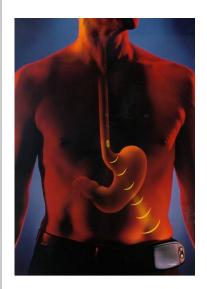
#### Literature Review

## **Bravo®** Wireless pH Monitoring







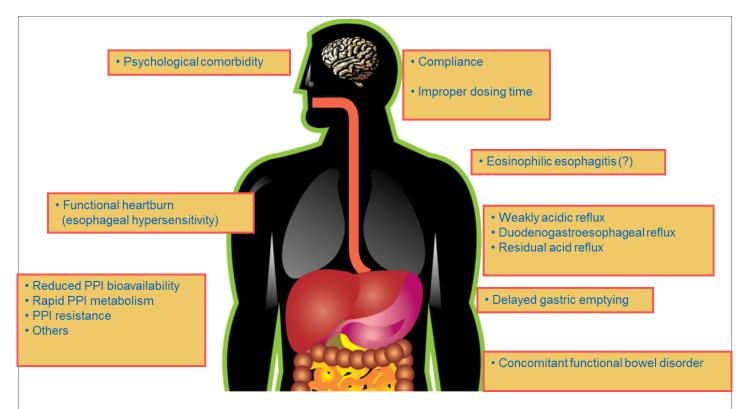
#### **Title**

# **Management of Heartburn Not Responding to Proton Pump Inhibitors**

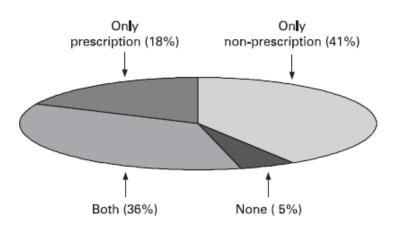
Fass R, Sifrim D, Gut 2009;58:295-309.

### **Key Points**

- 1. "Diagnostic evaluation of patients with GERD who have failed PPI treatment may include an upper endoscopy, pH testing and esophageal impedance with pH monitoring."
- 2. "It has been estimated that between 10% and 40% of patients with Gastroesophageal reflux disease fail to respond symptomatically, either partially or completely, to a standard dose PPI."
- 3. "In addition to compliance to taking PPIs, patients need to be evaluated for proper consumption of the PPIs because timing and frequency of dosing are critical for maximum efficacy of the medication."
- 4. "Most patients in whom symptoms are associated with weakly acidic reflux do not have an increased number of reflux events, suggesting hypersensitivity of the esophagus to less acidic refluxate."
- 5. Studies using wireless pH monitoring for 4 days showed a certain degree of day-to-day variability in symptom reflux association. Testing patients both on and off PPI treatment during one session may be helpful in determining if the PPI correctly reduces acid exposure.
- 6. Prolonged recording time with a wireless pH system can increase the sensitivity of the test for the detection of symptoms and correlation with acid reflux episodes.



Proposed underlying mechanisms for persistent heartburn despite treatment with Proton Pump Inhibitors (PPIs)



- 56% "breakthrough symptoms"
- 28% "only combination works"
- 21% "non-prescription is faster acting"

Figure 1 Reported type of medications used in the past 30 days by 1009 surveyed subjects with gastro-oesophageal reflux disease (GORD). The box shows the common explanations given by patients with GORD for adding a non-prescription drug to a prescription drug.<sup>4</sup>

4. The Gallup Organization. The 2000 Gallup Study of Consumers' Use of Stomach Relief Products. Princeton: Gallup Organization, 2000.