

Figure 35-1. Illustrating nocturnal acid breakthrough on twice-daily proton pump inhibitor and resultant gastroesophageal reflux. The bottom tracing shows a drop in intragastric pH to less than 4 overnight, usually seen 6 to 7 hours after the evening dose of proton pump inhibitor. During breakthrough in the upper tracing are 2 reflux episodes (pH drop < 4).

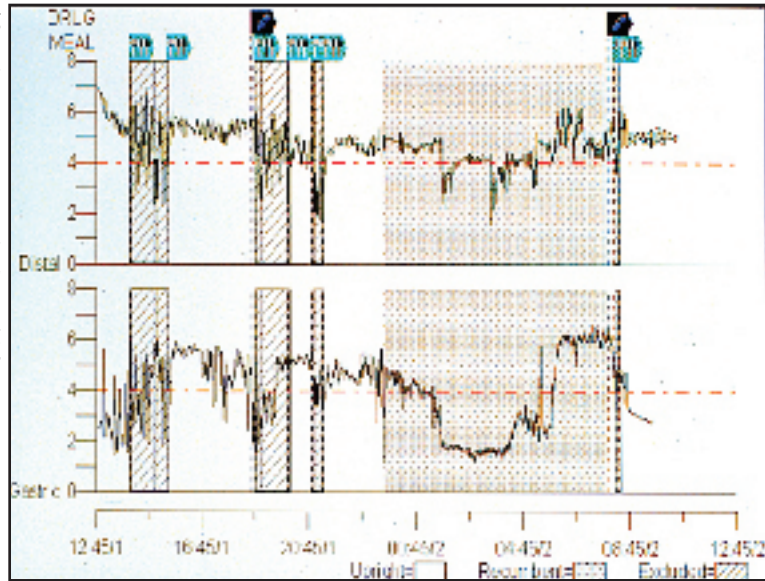
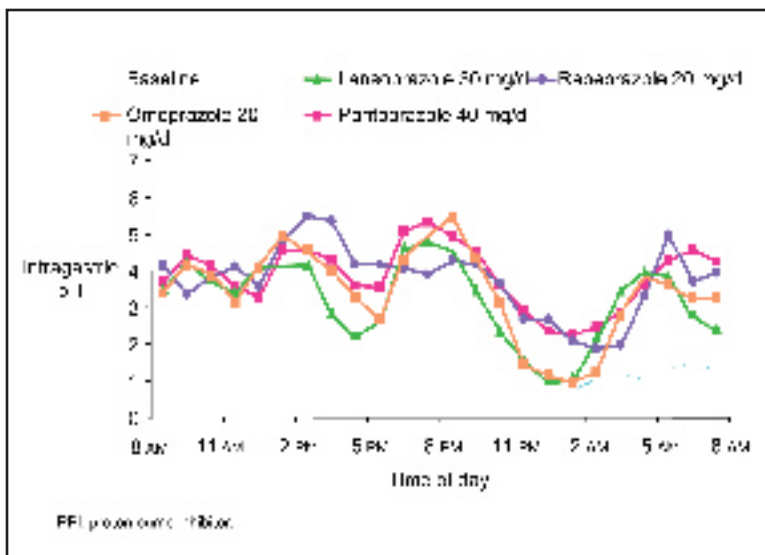


Figure 35-2. pH curves on once-daily proton pump inhibitor demonstrating overnight drop of intragastric pH to less than 4. (Reprinted from Tutuian R, Katz PO, Castell DO. A PPI is a PPI: lessons learned from prolonged intragastric pH monitoring. *Gastroenterology*. 2000;118:A17 [Abstract 332], with permission from Elsevier.)



8 times more likely to reflux during gastric acid breakthrough compared to those with normal motility.

The clinical importance and therefore the approach to NAB is the subject of much debate. There are few prospective or controlled clinical studies in which symptoms have been evaluated. Data suggest that 80% to 90% of patients with proven GERD will have adequate nighttime symptom relief on a single daily dose of a PPI. In the patient with continued symptoms, despite twice-daily PPI—and clinical experience suggests frequent symptomatic esophageal acid breakthrough is unusual in most GERD patients—I strongly suggest first reviewing the medication schedule to be certain the PPI is being taken before breakfast and dinner and not before bed as is too often the case. I then perform combined intragastric and