PWE-091

**CLINICAL DIAGNOSES REACHED IN PATIENTS
UNDERGOING COMBINED AMBULATORY PH
AND IMPEDANCE MONITORING FOR SYMPTOMS
SUSPECTED TO BE SECONDARY TO REFLUX DISEASE
REFRACTORY TO ACID SUPPRESSION**

doi:10.1136/gut.2011.239301.354

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Introduction Since August 2007 we have employed combined ambulatory pH and impedance monitoring in the investigation of patients with symptoms thought attributable to gastro-oesophageal reflux refractory to acid suppression. The aim of this study was to retrospectively analyse clinical data in patients who had undergone this investigation and ascertain the diagnoses reached.

Methods Information on patients undergoing combined ambulatory pH and impedance monitoring between August 2007 and August 2010 was obtained from the database at our GI physiology unit. Case records were then identified to ascertain the diagnoses reached in each case. Information obtained from the impedance studies included acid exposure time, frequency of acid and weakly acid reflux events and symptom association probability.

Results 57 patients underwent combined ambulatory pH and impedance monitoring over this time period. Case records were available for 52/57 patients. 51/52 underwent oesophageal manometry, 22/52 had upper GI endoscopy and 7/52 had scintigraphic measurement of gastric emptying. Following global assessment of the results of investigations 10/52 (19%) patients were found to have refractory reflux disease. 28/52 (54%) were judged to have functional symptoms, 4/52 had aerophagy, 4/52 gastroparesis, 3/52 oesophageal motility disorders, 2/52 hypersensitive oesophagus and 1/52 eosinophilic oesophagitis. 6/10 patients with refractory reflux disease agreed to surgical referral. 2 have since had fundoplication, 1 awaits fundoplication and 3 await surgical review.

Conclusion In this retrospective and uncontrolled cohort, use of combined ambulatory pH and impedance monitoring helped diagnose reflux refractory to acid suppression in 19% of patients investigated. Only 12% of patients having this investigation were referred for surgical management of reflux disease. Over half of patients investigated had no evidence of organic disease to account for their symptoms. Prospective studies are required to identify factors which will improve selection of patients for this investigation.

Competing interests None.

Keywords Impedance, pH monitoring, Reflux.