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Correction Abnormal gastric adaptive relaxation in patients with gastroesophageal reflux by M N Hartley, S J Walker, C R Mackie. May 1990 issue, pp 500–3. In this article several lines of text in the Methods section were transposed. The corrected text appears below.

Methods

SUBJECTS

Fifteen normal healthy volunteers were studied. These were 13 men and two women, with a median age of 30 years (range 22–41) and a median body weight of 70 kg (range 50–79) kg. Twelve patients with symptomatic gastroesophageal reflux were studied. They were eight men and four women, with a median age of 48 years (range 23–65) and a median body weight of 77 kg (range 60–92 kg). All subjects in the control group were asymptomatic. Among patients in the reflux group, eight were complaining of regurgitation, 11 of heartburn, and four of dysphagia.

The presence of pathological gastroesophageal reflux was confirmed in all patients in the reflux group by 24 hour ambulatory oesophageal pH monitoring. Pathological gastroesophageal reflux was defined as the presence of one or more of the following criteria: total reflux time greater than 6%, erect reflux time greater than 8%, supine reflux time greater than 2%; more than two reflux episodes longer than five minutes. A reflux episode was defined as a drop in pH to 4 or less.

Endoscopy showed macroscopic oesophagitis in seven patients, associated with a hiatus hernia in four patients. Five patients had no abnormality at endoscopy. None of the subjects in the control group was on any medication and all medication was withheld for 12 hours before the study in all patients. After an overnight fast, subjects swallowed, *via* the nose a 10F Ryle's tube with a collapsed, plastic bag (800 ml) sealed over the end, the side holes of the tube being within the bag. Within the lumen of the tube, positioned near its tip, was a pressure microtransducer (Gaeltec, Dingwall, Rosshire, Scotland) which was calibrated against a water manometer to provide a full scale deflection of

50 cm water pressure. The transducer was interfaced with an amplifier and pen recorder (Gould Electronics Limited, Coventry, England) to record pressure changes against time. The bag was positioned manometrically in the corpus-fundus region of the stomach. A baseline recording was obtained during a 15 minute rest period. Air from a compressed air cylinder (British Oxygen Company, Guildford, Surrey, England) was delivered at a constant rate through an air flow meter and a safety valve to the Ryle's tube. This constant flow of air was used to distend the bag at a rate of 15 ml/second for 30 seconds during which the pressure rise was recorded (dynamic recording). The recording was continued at this end volume for a further 150 seconds (static recording). The air was then aspirated with a syringe and the volume noted. This procedure was repeated at 15 minute intervals to provide four recordings for each subject, two each with the subjects sitting and supine. For each recording a dynamic pressure index was derived from the area under the curve during distension and a static pressure index was derived similarly, during the postinsufflation period of 150 seconds. These measurements were ascribed units in cm H₂O (Fig 1). A dynamic and static pressure index was derived for each subject, sitting and supine, based on the mean of the two values for each. These data were used to assess the effect of posture on gastric adaptive relaxation and also to compare the dynamic and static methods. Statistical analysis was by the Wilcoxon's signed-rank sum test for the former and the Mann Whitney U test for the latter. The reproducibility of the technique was assessed in duplicate studies on separate days among eight healthy volunteers, seven of whom were drawn from the control group for this study. The eighth subject gave a history of reflux symptoms and was therefore excluded from the control group for the main study. Reproducibility was expressed as the Spearman rank correlation coefficient calculated from the pressure indices obtained from paired studies. Finally, in view of the differences in ages and body weights between the two groups, a multiple regression model was created to see if there was any effect of these two variables on pressure index (Statistical Analysis System package, SAS Institute Inc, NC 27511, USA).