

Gastrin-17 (G-17) and Serum Pepsinogen I (sPGI) for Evaluation Of Patients With Gastroesophageal Reflux Disease (GERD) Compared To Dyspeptics or Ulcerous.

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Background: The prevalence of GERD is 25% of the general population and is due to an excess of acid into the oesophagus. High intragastric acidity, is related, by means of a negative feedback, to a low G-17 level. Increased sPGI and decreased G-17 levels could reflect acid hypersecretion.

Aim: To evaluate the G-17 and sPGI levels in patients with GERD compared to dyspeptic and ulcerous patients.

Patients and Methods: 359 patients (161 M, mean age: 46, range 2-90 years) without PPI treatment and anti Hp IgG levels lower than 44 UI/ml were selected from 1145 consecutive out-patients referred to our Department. This population was divided, on the basis of predominant symptoms and medical history, into : 144 with GERD, 203 with dyspepsia, three and nine with dyspeptic symptoms and a previous diagnosis of gastric (GU) and duodenal ulcer (DU) respectively. In all the patients, a blood sample was taken to evaluate serum G-17 and sPGI levels (EIA, Biohit, Finland).

Kruskal-Wallis one-way anova was used to compare the means of serological parameters between the different clinical subgroups.

Results: The mean of G-17 levels showed a stepwise increase from patients with peptic ulcer (DU: 5.1#61617;4.1, GU: 7.3#61617;5.5 pmol/l) to GERD (12.1#61617;25.2 pmol/l) and dyspeptic patients (15.5#61617;41.0 pmol/l), $p=0.72$. Conversely, the mean of sPGI levels was progressively increased from dyspeptic (90.3#61617;53.6 mcg/l) to GERD (108.8#61617;74.0 mcg/l) and ulcer patients (GU 138.0#61617;74.8, DU: 156.2#61617;59.9 mcg/l), $p<0.001$.

Conclusion: G-17 and sPGI could be useful, in the first approach, to the management of patients with upper gastrointestinal symptoms.