

# Electrogastrography As A Diagnostic Tool For Overlapping Dyspepsia In Irritable Bowel Syndrome Patients

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### Abstract :

Distinguishing between irritable bowel syndrome (IBS) and functional dyspepsia can be

challenging because of the variations in symptom patterns, which commonly overlap. Although the principles of electrogastrography (EGG) have been known for years, it is controversial whether alteration of gastric electrical activity (GEA) could be of clinical relevance in functional gastrointestinal disorders.

Aim of the work was to assess the role of electrogastrography and gastric emptying in diagnosis of overlapping dyspepsia in patients with irritable bowel syndrome (IBS). Subjects and methods: 120 patients with IBS were compared with 60 healthy controls. EGG was performed before and after a standard meal. Furthermore, gastric emptying (GE) and symptom scores were assessed.

Results: Of 120 IBS patients, 52 (43.3%) had dyspeptic symptoms as well as delayed gastric emptying. IBS patients with overlapping dyspepsia showed significantly more bradygastria (26.9%) than controls (5.9%) ( $P < 0.01$ ), also they had statistically significant lower PR compared to non dyspeptic patients ( $2.1 \pm 1.3$  vs.  $2.9 \pm 1.6$  respectively  $P < 0.05$ ), moreover gastric emptying time was delayed in IBS patients with overlapping dyspepsia ( $14.7 \pm 1.8$ ) compared to those without dyspeptic complaints and controls ( $10 \pm 1.27$  &  $10.6 \pm 2.1$  respectively) ( $P < 0.01$ ). Conclusion and recommendation: IBS patients with overlapping dyspepsia frequently reveal impaired gastric emptying and increased bradygastria, lack of a postprandial increase in the EGG amplitude, which may have pathophysiological significance in these patients. Using both EGG and gastric emptying test can aid in the detection of functional disorders associating IBS and therefore achieve greater patient satisfaction with their treatment.

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### Key Word :

Electrogastrography, functional dyspepsia, gastric emptying, irritable bowel syndrome

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