

## The effect of trimebutine maleate on gastric emptying in patients with non-ulcer dyspepsia

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The study was designed to investigate the effect of trimebutine maleate, a drug used in both hyperkinetic and hypokinetic motility disorders, on gastric emptying in patients with non-ulcer dyspepsia having prolonged gastric emptying rates and to compare the parameters used for the determination of the lag period observed during the emptying of solid foods from the stomach. Gastric emptying was measured by the radionuclide technique. Twenty normal volunteers and 43 patients with non-ulcer dyspepsia participated in the study. Radionuclide imaging was performed by using a solid meal labeled with <sup>99m</sup>Tc-tin colloid. Of the patients with non-ulcer dyspepsia, 20 had prolonged gastric emptying. They were given three weeks of oral treatment with trimebutine maleate and had their radionuclide gastric emptying study repeated. Treatment with trimebutine maleate resulted in reduction in duration of the lag period and less retention of food at 100 minutes ( $p < 0.0005$ ). After treatment with trimebutine maleate, no significant difference has been observed in the mean symptom score of patients with prolonged gastric emptying. Among the parameters used for the determination of the lag period, lag period determined by a mathematical equation (TLAG) has been found to be longer than the lag period determined by visual inspection of the images (VLAG) and there was correlation between the two parameters when the lag time was short.

**Key words:** trimebutine maleate, gastric emptying, non-ulcer dyspepsia, lag phase, radionuclide imaging