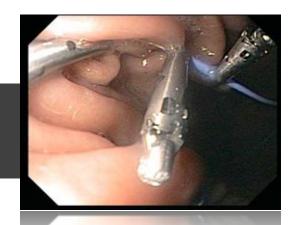


# Depression and Gastroparesis: A Histological, Physiological and Clinical Outcome Analysis in Response to Gastric Stimulation

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## Introduction



Gastroparetic (GP) patients often present with gastrointestinal symptoms perceived to be psychiatric or psychosomatic in origin. For gastroparetic patients with and without self-reported depression, we hypothesized differences in treatment outcomes, gastric histology and physiology when undergoing temporary gastric

stimulation (GES).

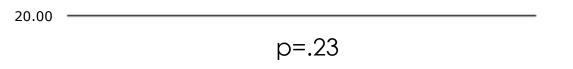
## Methods

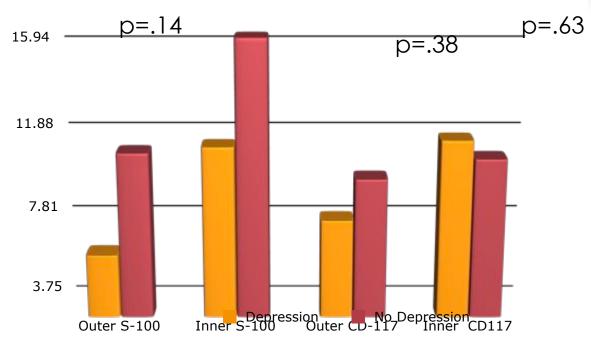


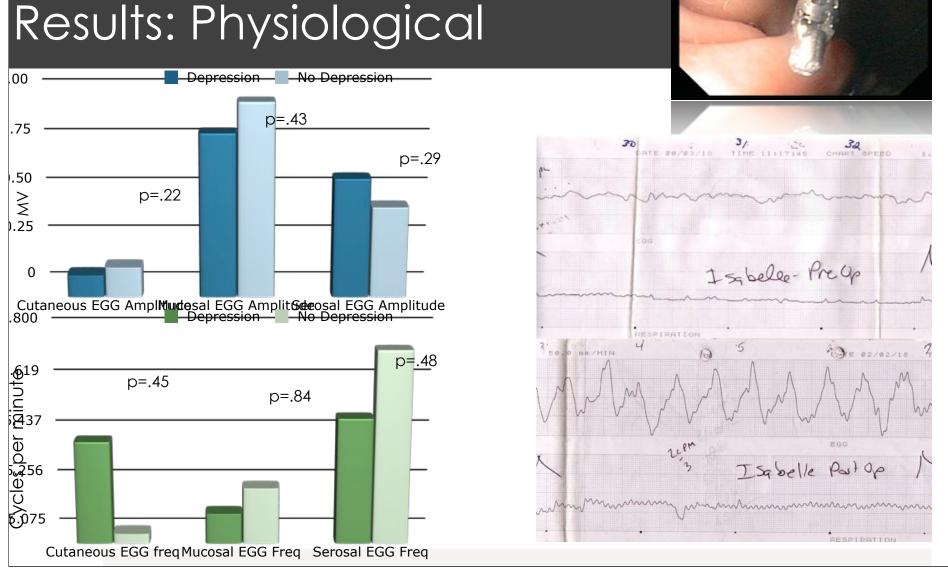
- Temp Stim: Electrode implanted endoscopically. Wire placed transnasally.
- Patients: 67 f, 13 m; mean age 43
- Diagnoses included 26 DM, 53 ID, 1 post-surgical
- 47 with self-reported depression and 33 without.
- Total symptom score (TSS) is the sum of patient reported outcomes (0-4) measuring nausea, vomiting, epigastric pain, bloating, and early satiety. TSS recorded before and after temporary GES placement.
- Full thickness biopsies were obtained at permanent GES placement.

# Results: Histological

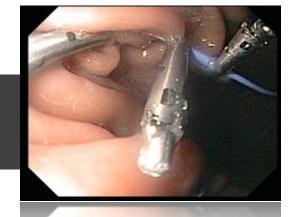






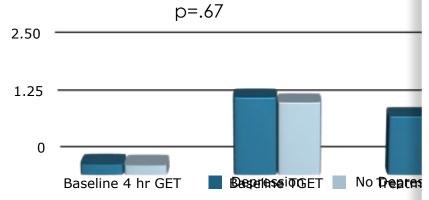


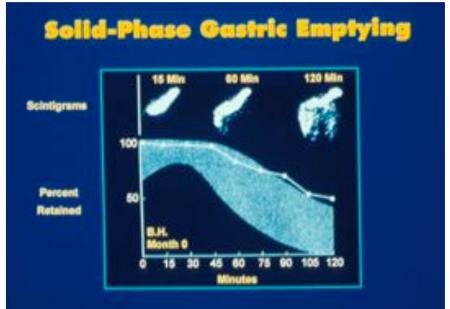
# Results: Gastric Emptying





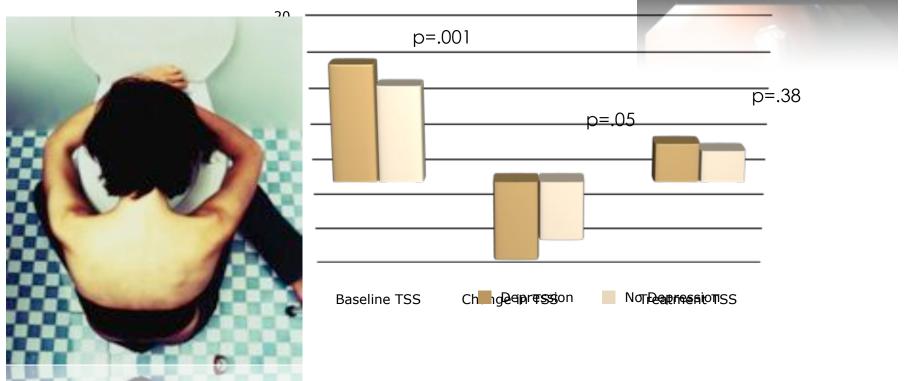
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# Results: Total Symptom Scores





Total symptom score (TSS) is the sum of patient reported outcomes (0-4) measuring nausea, vomiting, epigastric pain, bloating, and early satiety.

### Conclusions



- Depression is common among gastroparesis patients.
- No statistically significant histological or physiological differences were observed between patients with and without depression.
- Depressed patients present with worse GI symptoms than patients with no depression.
- Depressed patients improved more than non depressed patients after temporary GES, resulting in Total Symptom Scores similar to non-depressed patients.
- Temporary GES is not contraindicated for patients with depression.