

EFFECTS OF ELECTROACUPUNCTURE ON POSTOPERATIVE GASTROINTESTINAL RECOVERY AFTER GASTRECTOMY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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INTRODUCTION

Gastrointestinal immobility is common after gastric surgery and is associated with delayed enteral nutrition, prolonged hospital stay, and patient discomfort. **Electroacupuncture (EA)** is a widely used nonpharmacological therapy for gastrointestinal dysmotility.

This meta-analysis evaluated the effects of **EA** on **postoperative gastrointestinal immobility** following gastrectomy

MATERIALS AND METHODS

- Searched Embase, PubMed, and Cochrane
- RCTs only**
- Inclusion:** Electroacupuncture in postoperative gastrointestinal function after gastric surgery
- Exclusion:** different type of surgery and interventions
- Primary outcome:** time to first flatus (TFF) and time to recovery of bowel sounds (RBS)
- Calculated weighted mean differences for continuous data and risk ratios for binary data with 95% confidence intervals; heterogeneity assessed with I²; analysis done in RevMan 5.4.

EA improved postoperative gastrointestinal recovery after gastrectomy by shortening TFF and reducing the time of recovery of bowel sounds.



487 initial results
41 full-text reviews after deduplication and screening
4 studies included

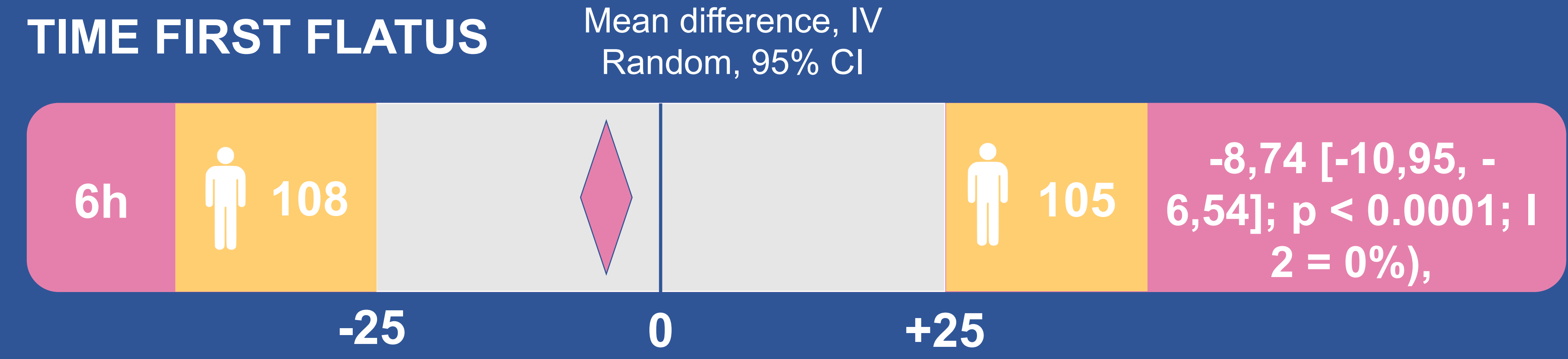


596 patients
50.67% received **EA**

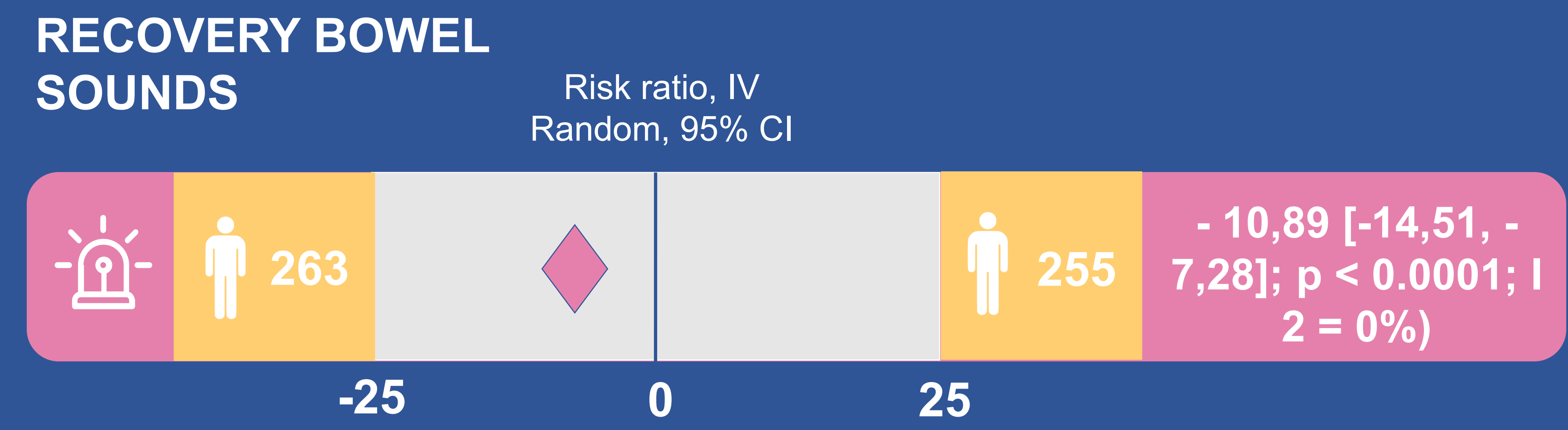


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TIME FIRST FLATUS



RECOVERY BOWEL SOUNDS



RESULTS

- Study Selection:**
- 487 initial results; 41 full-text reviews after deduplication and screening.
 - 4 studies included (main exclusions: non laparoscopic, outcome of interest not reported)
 - Total 596 patients; 302 (50.67%) received EA.

- Baseline Data:**
- Groups had comparable baseline characteristics (Table 1).

- Outcomes:**
- EA significantly reduced time to gastrointestinal recovery.
 - Control: TFF ranged from 46.8 ± 18.79 to 82.08 ± 30.45 hours, and RBS ranged from 22.73 ± 12.88 to 41.3 ± 4.74 hours. In EA groups, TFF ranged from 40.87 ± 12.22 to 69.46 ± 25.43 hours, and RBS ranged from 13.85 ± 8.07 to 34.13 ± 11.33 hours.
 - In the EA versus SHAM comparison, EA demonstrated a significant reduction in outcome measures [MD] −10.91; 95% [CI] −14.51 to −7.31; p < 0.00001), (Chi² p = 0.54; I² = 0%). EA vs standard care favored EA (MD −8.74; 95% CI −10.95 to −6.54; p < 0.00001), (Chi² p = 0.44; I² = 0%)

DISCUSSION

Electroacupuncture improved **postoperative gastrointestinal recovery** after gastrectomy and was more effective than SHAM or standard care in the included RCTs. With appropriate training or supervision, healthcare professionals can safely administer EA as part of postgastrectomy care, using commonly applied electrical acupoints to enhance gastrointestinal motility.

REFERENCES

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