

“Efficacy and safety of auricular point acupressure treatment for gastrointestinal dysfunction after laparoscopic cholecystectomy: study protocol for a randomized controlled trial”

Abstract:

This study uses Auricular Point Acupressure (APP) using Vaccaria seeds on the large intestine point to study if it has an effect on postoperative gastrointestinal dysfunction. A standardized clinical trial was completed. Researchers used a double-blind, randomized, controlled trial to evaluate the effects and the safety of this treatment. The design was based according to the Consolidated Standards of Reporting Trials (CONSORT 2010) guidelines as well as STRICTA. The study used hospitalized patients who had undergone laparoscopic cholecystectomy. The study was done at the Department of Minimally Invasive Surgery of Tianjin Nankai Hospital. Evaluations were done immediately before treatments (6 hours after surgery). They were completed again every 12 hours for 7 evaluations. The primary outcome was to evaluate the time it took to pass the first flatus after surgery. The second was to measure the abdominal distension, nausea, vomiting,

time of first defecation, psychological status, and quality of life.

Introduction:

Gastrointestinal dysfunction is a very common issue, especially after abdominal surgery. The main symptoms that patients face after surgery are delayed flatus and defecation, abdominal distention, abdominal pain, nausea, and vomiting. Promoting rapid recovery in gastrointestinal function is an integral part of postoperative rehabilitation.¹

Case Presentation:

Gastrointestinal dysfunction commonly occurs following abdominal surgery. This typically takes at least 3 days to recover from, and the common treatment method is alvimopan.² Alvimopan has adverse effects such as nausea and vomiting.³ APP could be a noninvasive physical treatment for postoperative gastrointestinal dysfunction. During this therapy, they use sensitive points on the auricle stimulating them with Vaccaria seed. Each point corresponds with a different organ.

¹ Vather R, Trivedi S, Bissett I. Defining postoperative ileus: results of a systematic review and global survey. *J Gastrointest Surg.* 2013;17:962–72.

² Story SK, Chamberlain RS. A comprehensive review of evidence-based strategies to prevent and treat postoperative ileus. *Dig Surg.* 2009;26:265–75.

³ Marderstein EL, Delaney CP. Management of postoperative ileus: focus on alvimopan. *Ther Clin Risk Manag.* 2008;4:965–73.

Management and Outcome:

This study used a “randomized, double-blind, controlled, single-center, clinical, pilot trial.”⁴ This design is in accordance with the Consolidated Standards of Reporting Trials and Standards for Reporting Interventions in Controlled Trials of Acupuncture. Patients were randomly assigned a group and evaluations were performed. After surgery, each subject lay in a supine position without a pillow. The subject was given a liquid diet on the day after surgery. In the experimental group, therapy was performed 6 hours after the operation. Then every 12 hours after for seven treatments. The acupressure point used was CO7. The tools were brought to the bedside of the patient. The Vaccaria seeds were attached to the ear. Pressure is applied to both ears alternatively not rubbing. Optimal pressure was considered to be achieved when the patient felt localized tinging pain. The Vaccaria seeds were fixed with tape to prevent them from coming loose.

Discussion:

“Anesthesia, carbon dioxide pneumoperitoneum, surgical trauma,

inflammation, postoperative bed rest, and other factors can cause postoperative gastrointestinal dysfunction in LC patients.” Without proper treatment, these can all can lead to longer hospitalization and recovery periods. The current treatment for postoperative gastrointestinal dysfunction is fasting, gastrointestinal decompression, early ambulation, enema, chewing gum, gastropkinetic drugs, and early enteral nutrition.

The first passage of flatus after surgery has become a clinically significant part of the recovery of gastrointestinal mobility. This study evaluates the recovery of gastrointestinal function through the passage of the first flatus. They found the clinical significance of using the APP on the large intestine point CO7 with Vaccaria seeds.

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