

INPLASY PROTOCOL

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Conflicts of interest:
None declared.

Effectiveness of acupuncture on the recovery of gastrointestinal function in patients with colorectal cancer surgery: A protocol for systematic review and meta-analysis

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Review question / Objective: The aims are: 1. To evaluate the effect of acupuncture on the recovery of gastrointestinal function after CRC; 2. To provide the latest literature basis for clinical comprehensive decision-making.

Condition being studied: Colorectal cancer (CRC) is one of the most common gastrointestinal malignancy and surgical resection is the main treatment. Gastrointestinal dysfunction is the most common postoperative complication in patients with colorectal cancer. Acupuncture can regulate gastrointestinal function. This study was designed to evaluate the effect of acupuncture on gastrointestinal function in patients with colorectal cancer postoperative recovery.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 June 2021 and was last updated on 17 June 2021 (registration number INPLASY202160056).

INTRODUCTION

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evaluate the effect of acupuncture on gastrointestinal function in patients with colorectal cancer postoperative recovery.

METHODS

Participant or population: All postoperative patients with CRC, regardless the age, gender, race, country and diseases.

Intervention: Combined with acupuncture and moxibustion treatment on the basis of the comparators group, such as body acupuncture, electro-acupuncture, auricular acupuncture, warm acupuncture, fire needling, elongated needle and moxibustion.

Comparator: Routine perioperative treatment, such as fasting water, intravenous fluid replacement, gastrointestinal decompression and so on.

Study designs to be included: RCTs.

Eligibility criteria: 1. All randomized controlled trials (RCTs) reported will be included without regional and language restrictions. Animal studies, cohort studies, case-controlled studies, case reports and expert experience will be excluded. 2. All postoperative patients with CRC, regardless the age, gender, race, country and diseases. 3. Routine perioperative treatment, such as fasting water, intravenous fluid replacement, gastrointestinal decompression and so on. 4. Combined with acupuncture and moxibustion treatment on the basis of the comparators group, such as body acupuncture, electro-acupuncture, auricular acupuncture, warm acupuncture, fire needling, elongated needle and moxibustion.

Information sources: The English databases include PubMed, Embase, Web of Science, Cochrane Library, and the Chinese databases include China National Knowledge Infrastructure (CNKI), Wanfang Data, Chinese Science Journal Database (VIP database) and China Biomedical Literature Database (CBM) From setup time to March 2021. In addition, we will also

search the International Clinical Trials Registry Platform (ICTRP) and Chinese Clinical Trial Registry.

Main outcome(s): Primary outcomes: the first exhaust time and the first defecation time.

Additional outcome(s): Secondary outcomes: the abdominal distension score and degree of nausea.

Quality assessment / Risk of bias analysis: There are 2 reviewers using the Cochrane Collaboration to assess the quality of articles. It includes the following 7 domains: random sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, incomplete outcome data, selective reporting and other sources of bias. Each domain includes a judgment of low, high and unclear risk of bias according to information provided by authors. Any disagreements between reviewers will be resolved through discussion with a third reviewer.

Strategy of data synthesis: For continuous outcomes, will be used mean difference (MD) as the effect indicator with 95% confidence interval, and dichotomous data will be calculated as risk ratio (RR) or odds ratio (OR) as the effect index with 95% confidence interval. Respectively, I^2 will be used to statistic heterogeneity, It is regarded as the boundary that if $I^2 < 40\%$, a fixed will be more suitable, if $I^2 \geq 40\%$ and $< 75\%$, a random effect model will be performed, otherwise, there is considerable heterogeneity between studies. The Review Manager (RevMan) V.5.4 software will be used for statistical analysis.

Subgroup analysis: The subgroup analysis will be conducted if there is obviously substantial heterogeneity between the study results, following items will be considered: type of acupuncture, gender, age, and outcome styles.

Sensitivity analysis: We will perform the sensitivity analysis to verify the robustness

of the results. It includes the impact of methodological quality, study design and sample size.

Country(ies) involved: China.

Keywords: colorectal cancer, acupuncture, gastrointestinal function, protocol, systematic review.

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