INPLASY PROTOCOL

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Acupoint acupuncture for postoperative analgesia after general anesthesia: a meta-analysis

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Review question / Objective: The aim of this meta-analysis is To evaluate the effect of acupoint acupuncture on postoperative acute pain of patients under general anesthesia.

Condition being studied: With the development of comfort medical treatment, general anesthesia has become the most important anesthesia method in the operating room. Subjectively, patients only need to \"sleep\" to experience a surgical treatment.However, patients still feel pain when they wake up. At present, the commonly used postoperative painkillers are opioids and non-steroidal anti-inflammatory drugs. While exerting a powerful analgesic effect, it will also cause adverse reactions in multiple systems such as gastrointestinal tract and urinary tract. Acupoint acupuncture therapy has been proved to have analgesic effect, and its advantages such as safety, convenience and no toxic reaction have gradually appeared in perioperative combined analgesic treatment.So far, the study of general anesthesia acupuncture for acute postoperative pain is limited, and each study sample size is too small, for the system to evaluate the effect of acupuncture anesthesia and postoperative acute pain, adopt the method of evidence-based medicine, at the time of postoperative 24 hours visualization pain rating scale for the main observation indexes, by Meta analysis to understand the effect of acupuncture treatment for acute postoperative pain, To provide a better option for perioperative combined analgesia.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 April 2021 and was last updated on 14 April 2021 (registration number INPLASY202140075).

INTRODUCTION

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METHODS

Participant or population: Inclusion criteria: ① age ≥16 years old ② meet the criteria of elective surgery under general anesthesia Exclusion criteria: ① animal experiments; ② review articles; ③ The patient has a serious underlying disease; (4) There were no major outcome indexes among the outcome indicators; ⑤ Non-general anesthesia surgery; ⑥ non-acupoint stimulation; Auricular acupoint or intradermal embedding needle; (8) no blank control group; ⑨ There is no quantitative outcome indicator for articles unable to extract data.

Intervention: The experimental group received acupuncture (traditional acupuncture, percutaneous acupoint electrical stimulation, electroacupuncture stimulation).

Comparator: The control group was blank control.

Study designs to be included: Randomized controlled trials will be included.

Eligibility criteria: First, read the title and abstract to screen out the irrelevant literature, and then read the whole text thoroughly to determine whether the literature was included. Literature screening was carried out through these two steps. Research data extraction includes author, publication time, grouping and sample size, intervention method (operation name, course of treatment), allocation, whether blind method is used, efficacy indicators of concern, etc. Patients who had undergone surgery and received acupuncture, electroacupuncture, or acupoint electrical stimulation for acute postoperative pain were included. Ear acupuncture, except intradermal acupuncture studies. Only papers published in English or Chinese are included.

Information sources: This meta-analysis was conducted in accordance with the PRISMA guidelines [UK 10]. Computer retrieval of Chinese Science and Technology Journals Full Text Database (CNKI), Wangfang Database (Wangfang Database) Data, VIP database, CBM database, MEDLINE, Cochrane Library, and EMBASE database included clinical research literature on acupuncture for acute pain after general anesthesia. The retrieval time was from the establishment of the database to February 2021, and only Chinese and English literatures were included. Literature retrieval was conducted by combining subject words with free words, and Chinese search terms included \"acupuncture\", \"electroacupuncture\", \"acupoint electrical stimulation\", and \"postoperative pain after general anesthesia\". English

search terms include: \"Acupuncture\", \"electroacupuncture\", \"acupoint electrical stimulation\", \"postoperative\" Pain \", \"acupuncture\", \"randomized\", \"controlled\", \"randomized controlled trial\" etc.

Main outcome(s): In the included studies, there were two methods to evaluate the analgesia effect. One was to score the degree of pain 24h after surgery by visual analogue scale (VAS); The other is to evaluate the analgesic effect indirectly by counting the amount of opioid analgesics used within 24 hours after surgery.

Quality assessment / Risk of bias analysis: Literature was screened according to inclusion and exclusion criteria. The \"Cochrane Risk of Bias Assessment\" tool was used to evaluate the quality of the included studies in terms of how the random sequences were generated, whether they were assigned to hide, whether they were blinded, whether the data were complete, and whether they selectively reported bias and other biases. Each study was judged as \"yes\" (low bias), \"no\" (high bias), or \"unclear\" (lack of information or an evaluation of uncertain bias) for each of the six items described above.

Strategy of data synthesis: Two researchers were selected to independently conduct literature screening and data extraction, and cross-check. When the two sides held different opinions, a third researcher was required to intervene and assist in the evaluation. First, read the title and abstract to screen out the irrelevant literature, and then read the whole text thoroughly to determine whether the literature was included. Literature screening was carried out through these two steps. Research data extraction includes author, publication time, grouping and sample size, intervention method (operation name, course of treatment), allocation, whether blind method is used, efficacy indicators of concern, etc. Patients who had undergone surgery and received acupuncture, electroacupuncture, or acupoint electrical

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Subgroup analysis: As for the VAS score at 24h after surgery, which was the main outcome index, subgroup analysis was performed according to the number of groups of acupuncture points selected in the study. For the outcome measure of cumulative opioid use within 24 hours after surgery, subgroup analysis was performed based on the proportion of men in the study.

Sensitivity analysis: Sensitivity analysis was used to find the source of heterogeneity, and item by item elimination was used.

Country(ies) involved: China.

Keywords: Acupuncture; Postoperative general anesthesia; The pain.

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