

INPLASY PROTOCOL

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Conflicts of interest:
None declared.

INTRODUCTION

Review question / Objective: To study the efficacy of intravenous rehydration for hypotension occurring prior to tracheal intubation or surgery, the included studies were RCT studies.

Infusion of fluids before intubation or anesthesia: A meta-analysis of randomized controlled trials

Lu, ZF¹, Guo, JS²; Zhang, AP³; Ni, HB⁴.

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Condition being studied: When intubating critically ill patients or performing surgery on surgical patients, anesthesia induction is required, however induction of anesthesia can cause a series of adverse effects. The most common adverse reaction was hypotension, which was observed in 41~46% of patients. The efficacy of early rehydration remains unclear. This meta-analysis was performed to determine whether intravenous infusions before intubation or anesthesia had a beneficial effect.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 October 2022 and was last updated on 25 October 2022 (registration number INPLASY2022100099).

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efficacy of early rehydration remains unclear This meta-analysis was performed to determine whether intravenous infusions before intubation or anesthesia had a beneficial effect.

METHODS

Participant or population: Patients before tracheal intubation or induction of surgical anesthesia.

Intervention: Infusion of fluids.

Comparator: Patients without intravenous rehydration.

Study designs to be included: RCT.

Eligibility criteria: Patients before tracheal intubation or induction of surgical anesthesia.

Information sources: PUBmed、Embase、ClinicalTrials、Cochrane library.

Main outcome(s): Our primary objective was to see if intravenous rehydration reduces the incidence of hypotensive events after induction of anesthesia and the use of vasoactive drugs.

Quality assessment / Risk of bias analysis: Cochrane Systematic Evaluation Tool.

Strategy of data synthesis: Selecting REVman software for analysis, Using a standardized data form, we extracted several data elements from the included studies, including characteristics of the investigated population, the method used We collected the OR with its 95% confidence interval (95% CI) as a risk factor for mortality, if available. If data needed for the analysis were not retrievable from the text, tables or figures, we systematically asked them to the authors of the studies.

Subgroup analysis: We performed subgroup analysis according to critically ill patients and surgical patients.

Sensitivity analysis: Sensitivity analysis was performed using REVman to respond to the degree of sensitivity by removing one of the effect size changes after.

Country(ies) involved: China.

Keywords: Infusion of fluids, anesthesia, intubation.

Contributions of each author:

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Author 3 - zhang aiping.

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