

INPLASY

Dexmedetomidine for delirium prevention in adult patients following orthopedic surgery : a meta-analysis of randomized controlled trials

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 1 November 2024 and was last updated on 1 November 2024.

INTRODUCTION

Review question / Objective We sought to conduct a systematic review and meta-analysis to evaluate the efficacy and safety of dexmedetomidine for delirium prevention in adult patients following orthopedic surgery.

Condition being studied Delirium incidence, length of stay and related complications, etc.

METHODS

Participant or population Patients following orthopedic surgery.

Intervention Dexmedetomidine.

Comparator Placebo or propofol.

Study designs to be included The search strategy was RCTs.

Eligibility criteria (1) Adult patients following orthopedic surgery.(2) Patients with dexmedetomidine or others.(3) Outcomes Indicators: Delirium incidence, length of stay and related complications, etc.

Information sources We will search the references in the included trials and personal files. We will request advice from experts in the field. In addition, we will search associated articles from meetings, and contacted the authors of included trials, if need.

Main outcome(s) Delirium incidence.

Quality assessment / Risk of bias analysis We evaluated the methodological quality of the individual studies using the Cochrane risk of bias tool for RCTs.

Strategy of data synthesis We will consider using the number of participants between different groups for analysis.

Subgroup analysis We performed subgroup analysis according to the differences in the control group.

Sensitivity analysis We conducted sensitivity analyses to investigate the influence of a single study on the overall pooled estimate of each predefined outcome.

Language restriction None.

Country(ies) involved China.

Keywords Dexmedetomidine; Delirium; Orthopedic surgery.

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