

INPLASY

Perioperative management of patients with recent concussion: A Delphi consensus project study protocol

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ADMINISTRATIVE INFORMATION

Support - N/A.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2024120082

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 19 December 2024 and was last updated on 19 December 2024.

INTRODUCTION

Review question / Objective The aim of this study is to identify gaps in knowledge regarding perioperative management of patients with recent concussion and ultimately.

Rationale There is a lack of high-quality evidence from randomized controlled studies to answer important questions regarding the optimal management of post-concussion patients in the perioperative setting.

Condition being studied Concussion, or mTBI, can lead to deranged neurophysiology that persists for weeks to months post injury. Observational studies suggested that mTBI patients who were subsequently exposed to extra-cranial surgery and anesthesia had worse functional and neurocognitive outcomes as compared to mTBI patients without exposure to surgery and anesthesia.

METHODS

Participant or population Adult patients (>18 years) with recent concussion undergoing elective non-cardiac surgery.

Intervention N/A.

Comparator N/A.

Study designs to be included RCT, cohort studies, and meta-analyses.

Eligibility criteria Published in English from inception to July 2024.

Information sources MEDLINE, Pubmed, Embase, ClinicalTrials.gov, Cochrane database.

Main outcome(s) Establish consensus recommendations among a panel of international experts regarding the optimal perioperative management of patients with recent concussion.

Quality assessment / Risk of bias analysis To be determined.

Strategy of data synthesis Data will be extracted on study characteristics, concussion-specific factors, perioperative management details, and patient outcomes.

Subgroup analysis To be determined.

Sensitivity analysis To be determined.

Country(ies) involved University of Toronto, Canada; University of Manitoba, Canada; University of Washington, Seattle, USA.

Keywords concussion, traumatic brain injury, post-concussion syndrome, anesthesia, surgery, preoperative, perioperative, postoperative.

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