

INPLASY PROTOCOL

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Conflicts of interest:
None declared.

INTRODUCTION

Review question / Objective: This study will provide a theoretical basis for the clinical application of MIIA approach for anterior pelvic ring fracture, and guide the selection of pelvic fracture approach.

Comparative efficacy and safety of the minimally invasive ilioinguinal approach for anterior pelvic ring fracture: A protocol for systematic review and network meta-analysis

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Review question / Objective: This study will provide a theoretical basis for the clinical application of MIIA approach for anterior pelvic ring fracture, and guide the selection of pelvic fracture approach.

Condition being studied: Anterior pelvic ring fracture. Both the relevant Chinese and English databases are ready for retrieval systematically. All the randomized controlled trials (RCTs) of MIIA for anterior pelvic ring fracture from January 2016 to May 2021 will be incorporated. Researchers will screen the literature according to the inclusion criteria, then assess the risk of bias and extract data.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 06 November 2021 and was last updated on 06 November 2021 (registration number INPLASY2021110020).

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according to the inclusion criteria, then assess the risk of bias and extract data.

METHODS

Participant or population: We will collect all relevant RCTs of the minimally invasive ilioinguinal approach for anterior pelvic ring fracture published in Chinese or English. The diagnosis of anterior pelvic ring fracture will follow the guidelines for anterior pelvic ring fracture[1], regardless of age, severity, duration, race or gender. Child or adult patients with vitiligo were enrolled. Anxiety was diagnosed following Vitiligo disease activity score (VIDA), clinical features, homomorphic reaction, Wood lamp examination results, laser confocal scanning microscope (CT) and dermatoscope image changes.

Intervention: The control group have been treated with ilioinguinal approach open reduction, while the treatment group must have been treated with the minimally invasive ilioinguinal approach open reduction. The course of their treatments unrelated to the disease were not taken into account. The data in Stata 14.0 and WinBUGS software will be evaluated by Bayesian NMA.

Comparator: We will retrieval documents from all mainstream databases.

Study designs to be included: This study will provide a theoretical basis for the clinical application of MIIA approach for anterior pelvic ring fracture, and guide the selection of pelvic fracture approach.

Eligibility criteria: The diagnosis of anterior pelvic ring fracture will follow the guidelines for anterior pelvic ring fracture, regardless of age, severity, duration, race or gender.

Information sources: We will retrieval documents from all mainstream databases, such as Web of Science, PubMed, China BioMedical Literature (CBM), EMBASE, Cochrane Library, China National Knowledge Infrastructure (CNKI),

and Wanfang database, from January 2016 to May 2021.

Main outcome(s): The data we collected include operation time, intraoperative blood loss, "Matta Radiographic Score", "Majeed Pelvic Score", complications.

Quality assessment / Risk of bias analysis: According to the Cochrane Handbook, the two researchers independently evaluated the quality of the input articles from seven aspects. For each item, the correct use of method is low risk, unclear method is unclear risk, and incorrect or unused method is high risk. Two researchers will completed and cross checked independently, If there are disagreement for the data, they will consult with another researcher.

Strategy of data synthesis: We will retrieval documents from all mainstream databases, such as Web of Science, PubMed, China BioMedical Literature (CBM), EMBASE, Cochrane Library, China National Knowledge Infrastructure (CNKI), and Wanfang database, from January 2016 to May 2021. The search strategy mainly includes Medical Subject Headings (MeSH) and free-text terms, such as "Anterior Pelvic Ring, Fracture, Minimal Invasive, Ilioinguinal Approach, Safety, Randomized controlled trial" etc. The detailed search strategy of PubMed is shown in Table 1. In addition, we will search the ongoing trial registered on the International Clinical Trial Registration Platform.

Subgroup analysis: If there is enough data, we will consider grouping sensitivity analysis to evaluate the robustness and reliability of the combined results of meta-analysis. We will exclude each study one by one and then merge the effects. After excluding one article, if the heterogeneity changes, we think that the study may be the source of it.

Sensitivity analysis: If there is enough data, we will consider grouping sensitivity analysis to evaluate the robustness and

reliability of the combined results of meta-analysis. We will exclude each study one by one and then merge the effects. After excluding one article, if the heterogeneity changes, we think that the study may be the source of it.

Country(ies) involved: China.

Keywords: Pelvic fracture, minimally invasive, network meta-analysis, protocol.

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