

INPLASY PROTOCOL

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None declared.

Value of clinical tests for the diagnosis of ACL injury: A meta-analysis

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Review question / Objective: The objective of this review is to estimate the value of 4 clinical tests (Anterior Drawer Test, Lanchman Test, Pivot Shift Test and Lever Sign Test) for the diagnosis of ACL injury, thus providing reference for the early clinical diagnosis of ACL injury.

Condition being studied: ACL injury.

Information sources: PubMed, the Cochrane Library, Embase, Web of Science, The CNKI, WangFang Data, VIP, CBM, Chinese Clinical Trial Registry and Clinical Trials. gov.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 20 May 2021 and was last updated on 20 May 2021 (registration number INPLASY202150081).

INTRODUCTION

Review question / Objective: The objective of this review is to estimate the value of 4 clinical tests (Anterior Drawer Test, Lanchman Test, Pivot Shift Test and Lever Sign Test) for the diagnosis of ACL injury, thus providing reference for the early clinical diagnosis of ACL injury.

Condition being studied: ACL injury.

METHODS

Participant or population: ACL injury = 2408.

Intervention: Four clinical tests.

Comparator: arthroscopic visualization.

Study designs to be included: Diagnosis tests.

Eligibility criteria: Diagnostic test for the accuracy of clinical tests in diagnosis of ACL injury.

Information sources: PubMed ,the Cochrane Library, Embase, Web of Science, The CNKI, WangFang Data, VIP, CBM, Chinese Clinical Trial Registry and Clinical Trials. gov.

Main outcome(s): Sensitivity, Specificity, Area under the summary receiver operating characteristic curve(AUC) and a diagnostic odds ratio.

Quality assessment / Risk of bias analysis: QUDAS-2.

Strategy of data synthesis: The Rev Man 5.3software is used to evaluate the risk of bias of included articles. Meta analysis was performed using Meta Disc 1.4.First calculating the spearman correlation coefficient to analyze the threshold effect heterogeneity. Further adopting the chi test to analyze the statistical heterogeneity to judge the size of heterogeneity combined with I2.If these researches have statistical heterogeneity, using a random effect model in the exclusion of obvious clinical heterogeneity;If there is no heterogeneity, using the fixed effect model.The bias was examined by the deek funnel plot.

Subgroup analysis: Subgroups was analyzed by the condition of illness:acute and chronic.

Sensitivity analysis: The sensitivity was analyzed by STATA software, reflects the sensitivity by the changes of size effects after eliminating some articles

Country(ies) involved: China.

Keywords: clinical tests; ACL injury; QUDAS-2.

Contributions of each author:

Author 1 - Huang Zhihao.

Author 2 - Zou Miao.

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