INPLASY PROTOCOL

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Corresponding author:
Guo Tianci

2594576976@qq.com

Author Affiliation:
The First Teaching Hospital of Tianjin University of Traditional Chinese Medicine

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Review Stage at time of this submission: **Data extraction.**

Conflicts of interest:
None declared.

Meta-analysis of outcomes associated with oblique lateral interbody fusion ang transforaminal lumbar interbody fusion for degenerative lumbar spondylolisthesis

Guo, T[1]; Wang, H[2]; Liu, A[3]; Chen, J[4]; Yu, W[5].

Review question / Objective: **P: Patients with degenerative lumbar spondylolisthesis I: oblique lateral interbody fusion C: transforaminal lumbar interbody fusion O: Relevant outcome indicators.**
Condition being studied: **The prevalence of degenerative spondylolisthesis (DSL) in the general population has been estimated at 5–7%. Minimally invasive transforaminal lumbar interbody fusion (TLIF) and oblique lumbar interbody fusion (OLIF) are available and widely used for the treatment of DSL.The present study aimed to summarize the radiographic,Safety evaluation, clinical outcomes and Other related indicators of OLIF and MI-TLIF for degenerative lumbar disease.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 19 February 2021 and was last updated on 19 February 2021 (registration number INPLASY202120064).

INTRODUCTION

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METHODS

Participant or population: Degenerative lumbar spondylolisthesis.

Intervention: Oblique lateral interbody fusion.

Comparator: Transforaminal lumbar interbody fusion.

Study designs to be included: A total of 22 studies met the inclusion criteria and were analyzed. Any discrepancies in data extraction between the 2 reviewers were resolved through mutual agreement.

Eligibility criteria: 1) a diagnosis of lumbar degeneration spondylolisthesis and spinal stenosis, degenerated kyphoscoliosis, and discogenic low back pain through radiographs and magnetic resonance imaging, myelography, and computed tomography after myelography; 2) degenerative lumbar disease treated with OLIF or MI-TLIF surgery

Information sources: PubMed Search: 73 EMBASE Search: 3 Cochrane Search: 9 Web of science Search: 44 CNKI Search: 40 VIP search: 38 Wan Fang Search: 41 CBM search: 8.

Main outcome(s): 1. Clinical efficacy evaluation VAS score ODI score JOA score 2. Imaging evaluation Intervertebral height Intervertebral foraminal height Lumbar lordosis 3. Safety evaluation Intraoperative blood loss Postoperative drainage Complication rate 4. Other evaluation indicators The operation time The length of time Down time.

Quality assessment / Risk of bias analysis: Modified Cochrane methodological quality assessment tools were used.

Strategy of data synthesis: Reviewmanager 5.3.

Subgroup analysis: If the necessary data are available, subgroup analyses will be done according the VAS score, DOI index, etc.

Sensitivity analysis: Change the statistical effect model of the combined amount

Country(ies) involved: China.

Keywords: Degenerative lumbar spondylolisthesis; Degenerative lumbar disease; Lumbar fusion; TLIF; OLIF.

Contributions of each author:
Author 1 - Guo Tianci.
Author 2 - Wang Huaijing.
Author 3 - Liu Aifeng.
Author 4 - Chen Jixin.
Author 5 - Yu Weijie.

Conflicts of interest: The authors have no relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript. This includes employment, consultancies, honoraria,stock ownership or options, expert testimony, grants or patents received or pending, or royalties.

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