

INPLASY

Meta-analysis of preoperative psychological factors relationship to pain management following rotator cuff surgery

INPLASY202450070

doi: 10.37766/inplasy2024.5.0070

Received: 15 May 2024

Published: 15 May 2024

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202450070

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 May 2024 and was last updated on 15 May 2024.

INTRODUCTION

Review question / Objective What is the relationship between psychological factors and pain management following rotator cuff surgery?

Rationale The rationale is that previous research has indicated varied relationships between various psychological factors and patient experiences following rotator cuff surgery. The question is whether there is a consistent trend in the research that would benefit from being studied.

Condition being studied This study adheres to the reporting standards outlined by the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) reporting guidelines.

METHODS

Search strategy Pubmed:(“Rotator Cuff Surgery” [tiab] OR “rotator cuff repair”[tiab]) AND “pain” [tiab] AND (“preoperative”[tiab]) AND

(psychological[tiab] OR depression[tiab] OR “pain catastrophizing”[tiab])

Participant or population Rotator cuff surgery patients.

Intervention Rotator cuff surgery.

Comparator Control groups of participants are used to determine impact.

Study designs to be included We included Randomized controlled trials (RCTs), non-randomized trials (NRTs) and observational studies such as case-control or cohort investigations in which preoperative psychological factors impact pain management following rotator cuff surgery.

Eligibility criteria

Inclusion criteria

1. Types of studies

We included Randomized controlled trials (RCTs), non-randomized trials (NRTs) and observational

studies such as case-control or cohort investigations in which preoperative psychological factors impact pain management following rotator cuff surgery.

2. Types of participants

Men and women who have undergone rotator cuff surgery or rotator cuff repair

3. Types of interventions

Exclusion criteria

1. Types of studies

Qualitative studies or single opinion papers were excluded from the review.

2. Types of participants

Animal studies, studies including participants with acute or cancer pain, rotator tear revision surgery

3. Postoperative psychological factors.

Information sources This study adheres to the reporting standards outlined by the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) reporting guidelines. A protocol outlining the appropriate methodological design features of this systematic review was discussed and prepared before the onset of the investigation. This protocol is available upon request to the authors. An electronic search was performed in duplicate using PUBMED.

Main outcome(s) The outcome is the pain experienced by patients following rotator cuff surgery 6 months to a year following surgery.

Additional outcome(s) Additional outcomes of pain experienced at 3 months will be considered for inclusion if 6 month or a year timeline is not available.

Data management Excel datasheet.

Quality assessment / Risk of bias analysis

Division of research tasks combined with review of research tasks by other team members. Two authors conducted the literature search and data extraction independently in duplicate. Two authors completed the literature search and data extraction independently in duplicate. Any disagreements between raters in their article screening were resolved via discussion. If the discussion between the raters did not achieve resolution, a third author (RE) provided the final judgment as to whether the disputed article would be accepted.

Strategy of data synthesis The data synthesis will consider the correlation between psychological factors and pain experienced following rotator cuff surgery.

Subgroup analysis There is not a subgroup analysis.

Sensitivity analysis Sensitivity analysis will be provided by two researchers.

Language restriction English.

Country(ies) involved United States.

Other relevant information There is no additional relevant information.

Keywords Rotator Cuff Surgery; rotator cuff repair; pain; preoperative; psychological; depression; pain catastrophizing.

Dissemination plans The team has not discussed the dissemination plans of the study.

Contributions of each author

Author 1 - Asimina Lazaridou - Author 2 will assist in data extraction, article extraction, and statistical analysis.

Email: alazaridou@fielding.edu

Author 2 - Myrella Paschali - Author 3 will assist in data extraction decisions, article extraction, and statistical analysis.

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Author 3 - Monique Gilmore - Author 1 is going to be gathering the articles, providing data extraction, and providing statistical analysis.

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