INPLASY PROTOCOL

To cite: Lu. Association of malnutrition with surgical site infections after joint arthroplasty: a systematic review and meta-analysis. Inplasy protocol 202070036. doi: 10.37766/inplasy2020.7.0036

Received: 11 July 2020

Published: 11 July 2020

Corresponding author:
Shan Lu

caoyulongchn@163.com

Author Affiliation:
Peking University People's Hospital

Support: **None.**

Review Stage at time of this submission: **The review has not yet started.**

Conflicts of interest:
There is no conflict of interest in relation to this study.

Association of malnutrition with surgical site infections after joint arthroplasty: a systematic review and meta-analysis

Lu, S[1].

Review question / Objective: **To investigate the link between malnutrition with surgical site and periprosthetic joint infections (SSIs and PJIs) following total knee and hip arthroplasty (TKA and THA) through a comprehensive meta-analysis of observational studies.**
Condition being studied: **A systematic search will conducted on PubMed databases through August 2020. Data from eligible studies will extracted and synthesized; pooled odds ratios (ORs) with 95% confidence intervals (CIs) will be estimated.**
Information sources: **All articles will considered irrespective of publication type; thus, we'll not exclude articles published as short reports or conference abstracts, even though critical appraisal of such publications may be limited.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 11 July 2020 and was last updated on 11 July 2020 (registration number INPLASY202070036).

INTRODUCTION

Review question / Objective: **To investigate the link between malnutrition with surgical site and periprosthetic joint infections (SSIs and PJIs) following total knee and hip arthroplasty (TKA and THA) through a comprehensive meta-analysis of observational studies**

Condition being studied: **A systematic search will conducted on PubMed**

databases through August 2020. Data from eligible studies will extracted and synthesized; pooled odds ratios (ORs) with 95% confidence intervals (CIs) will be estimated.

METHODS

Participant or population: Patient after joint replacement.

Intervention: Malnutrition.

Comparator: None malnutrition.

Study designs to be included: observational epidemiological studies (retrospective or prospective).

Eligibility criteria: Studies were eligible if they included patients with total knee or hip arthroplasty, evaluated malnutrition as a risk factor for SSI and/or PJI, and reported (or provided sufficient data to determine) an effect estimate with its confidence interval (CI).

Information sources: All articles will considered irrespective of publication type; thus, we'll not exclude articles published as short reports or conference abstracts, even though critical appraisal of such publications may be limited.

Main outcome(s): Surgical site and periprosthetic joint infections (SSIs and PJIs).

Quality assessment / Risk of bias analysis: The risk of bias in included studies will examined using the NewcastleeOttawa Scale, a validated tool that incorporates information on three predefined domains: selection of the study groups; comparability of the groups; and ascertainment of either the exposure or outcome of interest for caseecontrol or cohort studies, respectively.

Strategy of data synthesis: Pooled effect estimates and 95% CIs will calculated under the assumption of a random-effects model. Publication bias will evaluated using the Begg's and Egger's tests, as well as the funnel plot.

Subgroup analysis: Subgroup analysis will performed for total knee joint and total hip joint.

Sensibility analysis: Sensibility analysis by STATA 14.2.

Country(ies) involved: China.

Keywords: Malnutrition; Surgical site infection; Periprosthetic joint infection; Total hip arthroplasty; Total knee arthroplasty.

Contributions of each author:
Author 1 - Shan Lu.