INPLASY PROTOCOL

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Corresponding author:
Xue'er Li

5862955@qq.com

Author Affiliation:
The Affiliated Xiangshan Hospital of Wenzhou Medical University.

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Conflicts of interest:
None declared.

Sarcopenia and mild cognitive impairment: A systematic review and meta-analysis

Li, X[1]; Chen, Z[2]; Hong, B[3]; Han, S[4]; Zhou, C[5]; Ye, Q[4]; Lai, H[7].

Review question / Objective: **Sarcopenia and mild cognitive impairment are two of the most prevalent causes of disability in the aging population. Despite the vast amount of research that has been done to quantify the association between these two conditions, extensive systematic reviews and meta-analyses remain limited.**
Condition being studied: **Sarcopenia and mild cognitive impairment. We have completed literature retrieval, literature screening, literature data extraction, literature quality evaluation and other work. Now we are conducting literature data analysis, and then we will start to write the paper.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 31 January 2022 and was last updated on 31 January 2022 (registration number INPLASY202210136).

INTRODUCTION

Review question / Objective: **Sarcopenia and mild cognitive impairment are two of the most prevalent causes of disability in the aging population. Despite the vast amount of research that has been done to quantify the association between these two conditions, extensive systematic reviews and meta-analyses remain limited.**

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METHODS

Participant or population: Mild cognitive impairment patients.

Intervention: Sarcopenia.

Comparator: No sarcopenia.

Study designs to be included: Cross-sectional studies and cohort studies.

Eligibility criteria: Cross-sectional studies and cohort studies about sarcopenia and mild cognitive impairment were included and were limited to literature written in English.

Information sources: Pubmed; embase; Medline; Web of Science.

Main outcome(s): Sarcopenia was independently associated with mild cognitive impairment.

Quality assessment / Risk of bias analysis: Agency for Healthcare Research and Quality(AHRQ) the Newcastle-Ottawa Scale (NOS) for quality assessment.

Strategy of data synthesis: Summary estimates and corresponding 95% CIs for the outcome the relationship between sarcopenia and the risk of mild cognitive impairment were pooled. If a study included multiple sarcopenia assessment methods or multiple cognitive impairment assessment methods, each result was analyzed separately.

Subgroup analysis: We conducted subgroup analyses of study design, diagnostic criteria for mild cognitive impairment, diagnostic criteria for sarcopenia, and study quality.

Sensitivity analysis: Sensitivity analyses were performed for all included studies.

Language: English.

Country(ies) involved: China (The Affiliated Xiangshan Hospital of Wenzhou Medical University).

Keywords: Sarcopenia ;mild cognitive impairment; MCI.

Contributions of each author:
Author 1 - Zhi Chen.
Author 2 - Bo Hong.
Author 3 - SaiYue Han.
Author 4 - ChunNa Zhou.
Author 5 - QianQian Zhou.
Author 6 - HongYa Lai.