INPLASY

Risk factors for major adverse cardiac events following subarachnoid hemorrhage: a systematic review and meta-analysis

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ADMINISTRATIVE INFORMATION

Support - None.

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

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2024100094

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 October 2024 and was last updated on 22 October 2024.

INTRODUCTION

Review question / Objective Major adverse cardiac events are common in patients with subarachnoid hemorrhage and have become a focus of clinical management for intensive care physicians and neurosurgeons due to their impact on patient prognosis.The risk factors for major adverse cardiac events remain unknown, and some risk factors are controversial.This study aims to explore the effects of gender, history of hypertension, history of heart disease, and history of smoking on major adverse cardiac events after SAH through systematic review and meta-analysis.

Condition being studied Subarachnoid hemorrhage is a relatively common disease in clinical practice, and there are many related studies; we have sufficient personnel to work together to complete this study.

METHODS

Participant or population The patients were spontaneous subarachnoid hemorrhage.

Intervention Risk factors:gender, history of hypertension, history of heart disease, and history of smoking.

Comparator Major adverse cardiac events and No-major adverse cardiac events.

Study designs to be included retrospective study and prospective study.

Eligibility criteria Inclusion criteria:The patients were spontaneous subarachnoid hemorrhage;Improved myocardial enzyme and cardiac ultrasound during hospitalization; exclusion criteria:Non-spontaneous subarachnoid hemorrhage;minors;Clinical studies with incomplete data.

Information sources Cochrane、Web ofScience、PubMed、Enbase.

Main outcome(s) The objective is to determine whether gender, smoking history, history of heart disease, and history of hypertension are risk factors for major adverse cardiac events after subarachnoid hemorrhage.

Quality assessment / Risk of bias analysis Cochrane quality review.

Strategy of data synthesis Statistical analyses were performed using Revman or Stata software; heterogeneity was assessed using I2, and sensitivity and publication bias analyses were also conducted.

Subgroup analysis Subgroup analysis was conducted for the groups with obvious heterogeneity to find the source of heterogeneity.

Sensitivity analysis A sensitivity analysis of the positive results was carried out to assess their stability and determine the robustness of the findings.

Country(ies) involved The Second Affiliated Hospital of Xuzhou Medical University, Xuzhou 221000, Jiangsu Province, China.

Keywords Subarachnoid hemorrhage; Major adverse cardiac events; Gender; History of hypertension; History of heart disease; Smoking history.

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