INTRODUCTION

Review question / Objective: This systematic review aimed to investigate whether early physical rehabilitation could have a beneficial effect for the patient with intracerebral hemorrhage stroke compared with standard rehabilitation care.

Condition being studied: The patient with intracerebral hemorrhage stroke

METHODS

Participant or population: The patient with intracerebral hemorrhage stroke.
Intervention: Early physical rehabilitation.

Comparator: Standard rehabilitation care or usual care.

Study designs to be included: Randomized controlled trials.

Eligibility criteria: The RCTs which investigate the rehabilitation effectiveness of the early mobilization for the intracerebral hemorrhage compared with routine nursing or standard care will be eligible for this systematic review.

Information sources: A systematic search of the literature will be conducted using the PubMed, Web of science, Cochrane library, and four Chinese databases, which including Chinese Biomedical Databases (CBM), China National Knowledge Infrastructure (CNKI), Wanfang and Chongqing VIP. No restrictions in language, publication date or publication year are applied. Additional source including WHO clinical trial registry website, clinicaltrial.gov, conference abstracts, will also be searched. Further, the references of included trails will also be checked for more potential studies.

Main outcome(s): The primary outcomes include the mortality, the functional performance and quality of life evaluated by the Functional Independence Measure (FIM-motor), Postural Assessment Scale for Stroke Patients, and Functional Ambulation Category (FAC), Modified Barthel Index, Short Form-36 (SF-36), and other validated scales. The secondary outcomes include the length of stay, recurrent stroke, and adverse effects.

Quality assessment / Risk of bias analysis: The risk of bias (ROB) for included studies will be assessed using the Cochrane collaboration’s tool by two independent reviewers form the following dominants: the assessment includes sequence generation; allocation concealment; blinding of participants, personnel, and outcome assessors; incomplete outcome data; selective outcome reporting; and other sources of bias.

Strategy of data synthesis: RevMan version 5.3 will be used to conduct all calculations related to the meta-analysis. Dichotomous data will be calculated in terms of a fixed or random effect model and expressed by the relative risk (RR) with 95% confidence interval (CI). Continuous data will be presented as mean difference and 95% CI. The inconsistency index (I2) and Chi-squared will be calculated for heterogeneity detection between studies. When assessing the difference in outcome, heterogeneity involving all trials will be examined. A value of P<0.05 will be considered statistically significant.

Subgroup analysis: The subgroup will be performed based on the several participants characters (including the various severity of stroke and different age), and therapy duration and start time of intervention, and the studies qualities according to the assessment results of risk of bias, etc.

Sensibility analysis: Sensitivity analysis will be carried out for primary outcomes by removing one study a time to investigate the robustness of the meta-analysis result.

Country(ies) involved: China.

Keywords: Rehabilitation; early physical rehabilitation; intracerebral hemorrhage stroke; systematic review.

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