

INPLASY

The Carotid Artery Stenting could improve Cognitive Function in Patients with Extracranial Carotid Artery Stenosis

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ADMINISTRATIVE INFORMATION

Support - The First People's Hospital of Jining, Shandong Province, China.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2023100050

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 October 2023 and was last updated on 14 October 2023.

INTRODUCTION

Review question / Objective The objective of this study was to investigate the effects of carotid artery stenting on cognitive function, the selected research method is RCT experiment.

Condition being studied Carotid artery stenting is a surgical method to improve patients with internal carotid artery stenosis, which can reduce the risk of stroke and cognitive function also determines people's quality of life, So it is very important to study whether this kind of surgery has any effect on cognitive function.

METHODS

Participant or population Patients who fit the CAS surgical designation.

Intervention carotid artery stenting.

Comparator Drug therapy alone.

Study designs to be included RCT.

Eligibility criteria symptomatic ICAS patients with >50% stenosis or asymptomatic patients with >70% stenosis with good preprocedural activity of daily living.

Information sources Pubmed Web of science Embase.

Main outcome(s) Changes in cognitive function before and after surgery.

Quality assessment / Risk of bias analysis Cochrane literature quality evaluation tool.

Strategy of data synthesis Using Revman 5.4 software. The I² statistic expresses the inter-study heterogeneity, and the heterogeneity test is judged according to the P-value obtained by the Q test combined with I². If $P \geq 0.1$ and $I^2 \leq 50\%$, the fixed effect model was used for meta-analysis. $P > 50\%$, and the source of heterogeneity were analyzed. In the case of clinical heterogeneity, test for heterogeneity; If there was only statistical heterogeneity, the random effects model was used for meta-analysis. Mean Difference (MD) was used for continuous variables, and odds ratio (OR) was used for bitaxonomic variables. Significance level $\alpha = 0.05$ indicates a 95% confidence interval (95% CI), and $P < 0.05$ indicates a statistically significant difference.

Subgroup analysis According to the different cognitive domains on the cognitive assessment scale.

Sensitivity analysis The revman software performed the analysis to reflect the sensitivity of the article by the change in effect size after the deletion of one of the articles.

Country(ies) involved China.

Keywords carotid artery stenting、cognitive function.

Contributions of each author

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