INPLASY PROTOCOL

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Review Stage at time of this submission: Data extraction.

Conflicts of interest:
None declared.

Factors related to the risk of stroke in the population with type 2 diabetes: A meta-analysis and systematic review

Wang, K[1]; Xu, P[2]; Lv, Z[3]; Cui, Y[4]; Zhang, D[5]; Zhang, Y[6]; San X[7]; Wang, J[8].

Review question / Objective: This meta-analysis aims to present a collective view on the relationship between related factors and stroke in the type 2 diabetes population.
Condition being studied: Relationship factors and stroke in the type 2 diabetes population.
Information sources: Pubmed,Web of science ,Cochrane library,Medline and China National Knowledge Infrastructure databases.

INTRODUCTION

Review question / Objective: This meta-analysis aims to present a collective view on the relationship between related factors and stroke in the type 2 diabetes population.

Condition being studied: Relationship factors and stroke in the type 2 diabetes population.

METHODS

Participant or population: Patients diagnosed with type 2 diabetes people.

Intervention: Type 2 diabetes with stroke.

Comparator: Type 2 diabetes without stroke.

Study designs to be included: Case-control study and cohort study.

Eligibility criteria: (1) Prospective cohort study, nested case-control study; (2) Have clear diagnostic criteria；(3) Exclude reviews, comments, case reports, animal experiments; (4) OR and 95% confidence interval (or calculated result data) of stroke-related factors in the type 2 diabetes population must be reported; (5) Or the OR and 95% confidence interval of stroke per change unit related factors must be given. After omitting duplicate studies and/or studies in the same cohort, the most complete and recent study were finally included.

Information sources: Pubmed, Web of science ,Cochrane library, Medline and China National Knowledge Infrastructure databases.

Main outcome(s): The incidence of stroke in patients with type 2 diabetes.

Additional outcome(s): Factors related to the risk of stroke in the population with type 2 diabetes.

Quality assessment / Risk of bias analysis: Newcastle-Ottawa Scale.

Strategy of data synthesis: STATA 16.0 software was used and researchers used standard data extraction tables to collect the following information: article metadata, including the name of the first author; publication year, country or region, sample size, number of stroke cases, and related factors reported. We extracted the OR and 95% CI of stroke in the type 2 diabetes population for follow-up analysis. Choose the most appropriately adjusted model to evaluate the risk value of the final analysis when extracting the data. If the study does not report a risk estimate, an unadjusted estimate will be calculated based on the number of cases and controls in the defined category of related factors.

Subgroup analysis: When the heterogeneity was large, we performed subgroup analysis. According to the characteristics of the included articles, we performed subgroup analysis, such as the differences in diagnostic criteria.

Sensitivity analysis: If $I^2 \geq 50\%$ for the primary outcome, sensitive analysis was conducted by removing one article with an outlying effect size.

Country(ies) involved: China.

Keywords: stroke; diabetes; risk factors.

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