

INPLASY

Risk Factors for the Occurrence of Benign Paroxysmal Positional Vertigo after Successful CRP or Epley Maneuver: A Meta-analysis

INPLASY202430045

doi: 10.37766/inplasy2024.3.0045

Received: 12 March 2024

Published: 12 March 2024

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ADMINISTRATIVE INFORMATION

Support - N/A.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202430045

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 12 March 2024 and was last updated on 12 March 2024.

INTRODUCTION

Review question / Objective BPPV accompanied by hyperlipidemia, Meniere's disease, and head trauma were the risk factors of BPPV recurrence after CRP or Epley maneuver.

Condition being studied An increasing occurrence trend of benign Paroxysmal Positional Vertigo (BPPV) after successful canalith repositioning maneuvers was observed; however, the risk factors for the occurrence of this disease remain undefined. We aimed to conduct a meta-analysis of BPPV occurrence-associated risk factors reported.

METHODS

Participant or population The following inclusion criteria were employed: 1) Case-control study or cohort study reporting the risk factors for BPPV

recurrence; 2) odds ratios (ORs) with 95% confidence interval (CI) were described; 3) studies with complete data, including the number of recurrent and non-recurrent cases; 4) follow-up period ≥ 6 months.

Intervention N/A.

Comparator N/A.

Study designs to be included The following inclusion criteria were employed: 1) Case-control study or cohort study reporting the risk factors for BPPV recurrence; 2) odds ratios (ORs) with 95% confidence interval (CI) were described; 3) studies with complete data, including the number of recurrent and non-recurrent cases; 4) follow-up period ≥ 6 months. Reviews, case reports, conference abstracts, duplicated studies, and/or studies with insufficient data were excluded from this meta-analysis.

Eligibility criteria 1) Case-control study or cohort study reporting the risk factors for BPPV recurrence; 2) odds ratios (ORs) with 95% confidence interval (CI) were described; 3) studies with complete data, including the number of recurrent and non-recurrent cases; 4) follow-up period ≥ 6 months.

Information sources MEDLINE, EMBASE, PubMed, Springer, and the Cochrane Library up to June 2022.

Main outcome(s) BPPV accompanied by hyperlipidemia, Meniere's disease, and head trauma were the risk factors of BPPV recurrence after CRP or Epley maneuver. Keywords: Benign paroxysmal positional vertigo; Canalith repositioning procedure; Epley maneuver; Risk Factors.

Quality assessment / Risk of bias analysis The NOS was used for the quality evaluation. Two independent authors carried out the quality evaluation. Publication bias was assessed by Deeks' funnel plot asymmetry test.

Strategy of data synthesis This meta-analysis was conducted with RevMan (Version 5.3), and ORs and 95% CIs were employed to sum up the consequences. Data were pooled through a random-effects model. Heterogeneity was assessed using I² statistics. Sensitivity analyses were performed using a leave-one-out approach. The funnel plot was applied to investigate publication bias. Combined effects were estimated, and $P < 0.05$ was considered significant.

Subgroup analysis N/A.

Sensitivity analysis Sensitivity analyses were performed using a leave-one-out approach.

Country(ies) involved China.

Keywords Benign paroxysmal positional vertigo; Canalith repositioning procedure; Epley maneuver; Risk Factors.

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