Bleeding Risk from Anticoagulant Treatment in Patients with Cerebral Amyloid Angiopathy and Atrial Fibrillation: A Systematic Review

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Reference List

Introduction

- Presence of Cerebral Amyloid Angiopathy (CAA) with concomitant Atrial Fibrillation (AF) can complicate anticoagulation treatment decision.
- Limited knowledge is currently available regarding the risk-benefit analysis of anticoagulation treatment for CAA patients with AF.
- This systematic review aims to appraise all available literature regarding hemorrhage risk with anticoagulant medication in patients with CAA and AF.

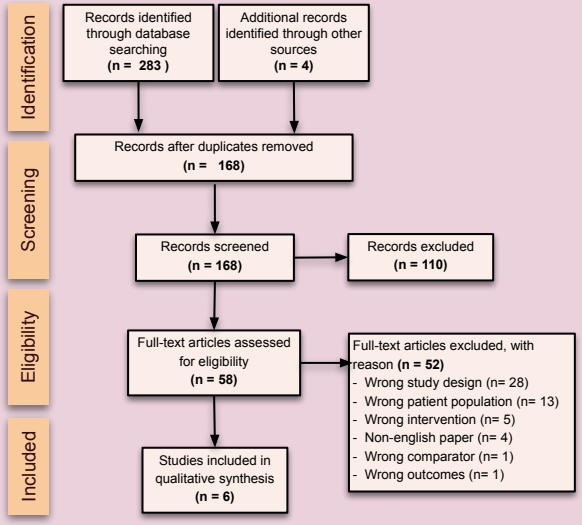
Method

Database used:
- Medline(PubMed and OVID)
- Embase

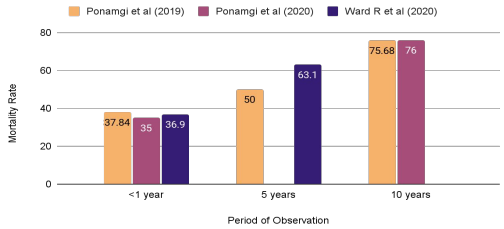
Screening performed by two independent reviewers (VL and ED).

Inclusion criteria:
- English papers
- CAA diagnosis using Boston Criteria or Modified Boston Criteria
- Patients ≥ 18 years old
- Published after 1995

PRISMA Flow Diagram

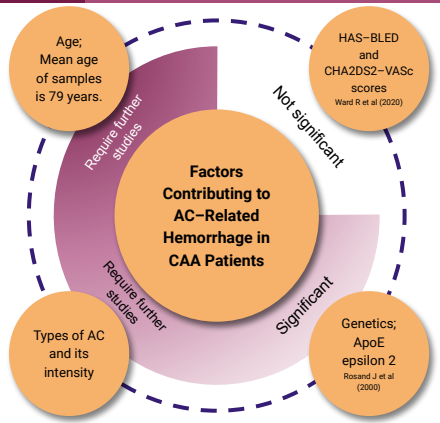


Mortality Rate of CAA Patients After Anticoaglation Administration

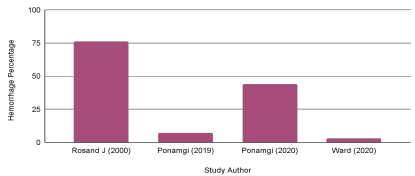


*Ponamgi et al (2019) and Ponamgi et al (2020) have overlapping cohorts

Results



Hemorrhage Rate of CAA patients After Anticoagulation Administration



50%

In four studies reporting the rate of hypertension, **more than 50%** of the total sample CAA patients restarting anticoagulation suffered from hypertension.

No outcomes measures were adjusted for this variable.

Two out of the six included studies reported **more than**

70%

mortality rate after 10 years of observation of AC administration in CAA patients.

Four out of six studies reported varying hemorrhage rate according to their respective cohorts.

Conclusion

Studies evaluating the association between CAA and hemorrhage risk with anticoagulation **are limited** with widely heterogenous outcome measures.

The role of previous hemorrhage and hypertension **needs to be explored further** in determining the contribution of anticoagulation to the risk of hemorrhage and further studies in this area would be of value in guiding clinical decision making.