

# Association between Oral Anticoagulants and the Risk of Dementia in Patients with Non-valvular Atrial Fibrillation

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## **Background**

- Non-valvular atrial fibrillation (NVAF) is associated with both vascular and non-vascular dementia, as shown in several studies.
- In patients with NVAF, oral anticoagulants (OACs) are recommended for the prevention of stroke, however their role in the prevention of dementia has not been well-defined.
- Previous studies have had inconsistent results and methodological limitations, and recent reviews have called for further evidence.

## **Objective**

- To assess whether the use of OACs is associated with the incidence of dementia in patients with NVAF.
- To assess whether the cumulative duration of OAC use is associated with the incidence of dementia.

## Methods and Results

- This was a large, population-based cohort study using the Clinical Practice Research Datalink, an electronic medical records database in the United Kingdom with over 15 million patients from 700 general practices.
- There were 142,227 patients with NVAF, with 8,023 cases of dementia over a mean follow-up of 4.7 years.
- OAC use decreased the risk of dementia by 12%, compared with no use (HR: 0.88; 95% CI: 0.84 – 0.92). This was evident within 1-2 years of cumulative use of OACs.
- This decrease was notable in older adults (aged  $\geq 75$  years), in whom OACs were associated with a 16% decrease in the risk of dementia (HR: 0.84; 95% CI: 0.80 – 0.89).

## Discussion

- In patients with NVAF, the protective effect of OACs on the risk of dementia supports their initiation or continuous use.
- This warrants consideration in clinical decision-making regarding the prescription of OACs, particularly in the elderly, in whom careful balancing of risks and benefits is necessary.



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