

THE ALERT STUDY

Atrial Fibrillation Screening and Cognitive Impairment in
Patients Attending Community Podiatry



Disclosure

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AF and MCI

AF is a type of **supraventricular cardiac arrhythmia** and is one of the most common cardiac arrhythmias.

The estimated global prevalence of AF is **37,574 million cases**.

AF is associated with substantially elevated stroke risk, heart failure, cardiovascular morbidity and premature death ⁽¹⁾

MCI is a condition characterised by cognitive decline, which is greater than expected for an individual's age and level of education but that does not significantly interfere with activities of daily living ⁽³⁾

A growing body of evidence suggests a link between AF and mild cognitive impairment ⁽⁴⁾



The ALERT Study

Scoping Review

- Synthesise and appraise the published literature surrounding the topic of AF and MCI
- Examine the relationship between AF and MCI, investigating proposed pathogenies
- Examine the incidence of MCI in people with AF.

Cross-sectional Study

- Opportunistically screen for AF using Doppler Ultrasound and ECGs
- Assesses cognitive function using the MoCA in patients attending a community podiatry setting in the West of Ireland.



Phase One: Scoping Review Aims



Prevalence

1) To describe the prevalence of MCI in patients with AF without prior stroke



Pathology

2) To investigate the Pathogenetic mechanisms linking MCI and AF



Tools

3) To examine current screening tools employed to identify MCI.

Scoping Review Results



Prevalence

The mean prevalence
Of MCI in patients
with AF was **37.84%**.



Pathology

White matter lesions,
Cardiovascular risk
factors
Silent cerebral
infarction
Cerebral
hypoperfusion

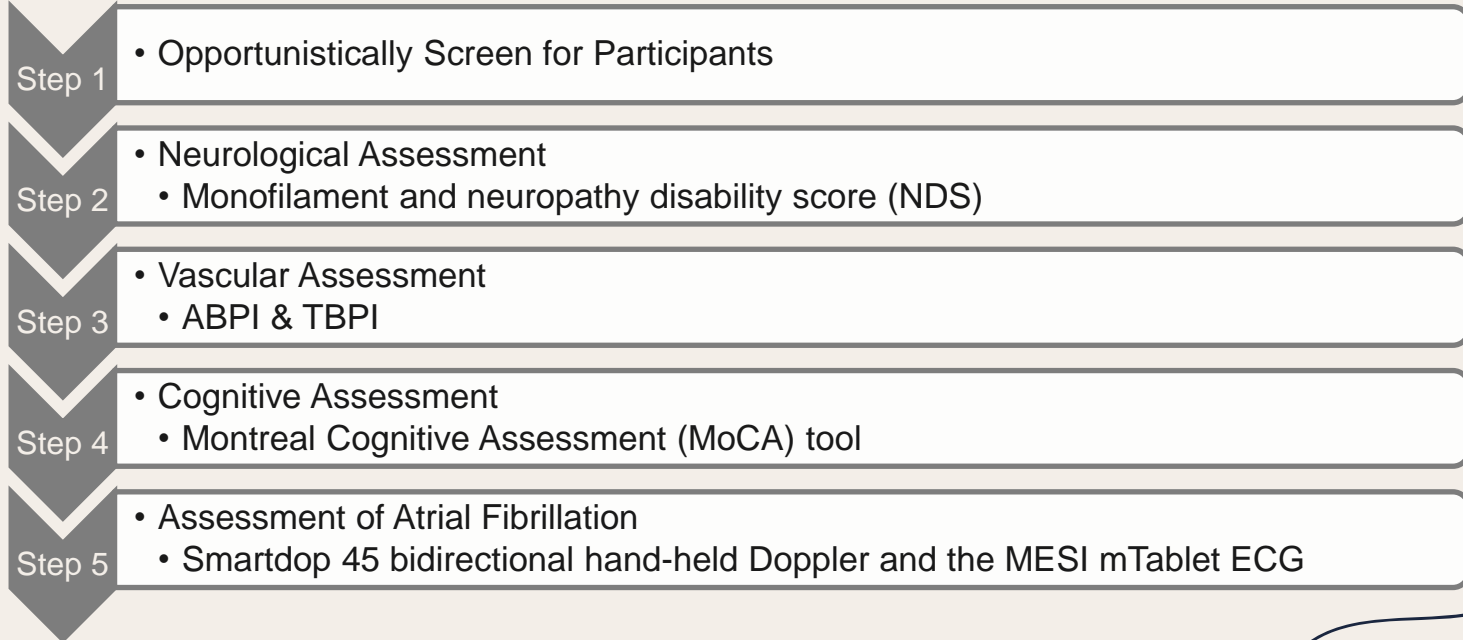


Tools

- A Battery of
cognitive tests
- MoCA test

Cross-Sectional Study

Phase two was a cross-sectional study conducted in a community podiatry setting in the west of Ireland



Cross-Sectional Study Results

Phase two opportunistically screened 214 patients

Prevalence of AF in this cohort was **15.4%**

50 (**23.4%**) participants had MoCA scores indicating MCI
7 (**3.2%**) participants had MoCA indicating moderate cognitive impairment.

A **statistical significance** was found between those with an **arrhythmia and lower MoCA scores** ($P=0.025$).

Key Points



This research shows the **key role that podiatrists** can play in the early detection of AF and MCI



Current literature suggests that the mean prevalence of MCI in patients with AF is **37.84%**



This study screened 214 participants, and the prevalence of AF identified was **15.4%** in participants attending community podiatry

THANK YOU

Thank you to all the participants and
researchers involved in this study.

For any suggestions or queries, please contact:

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