

# **Delayed Detection of Atrial Fibrillation after Ischemic Stroke**

## **Abstract**

**Background:** Detection of atrial fibrillation after ischemic stroke is important because anticoagulation is indicated to reduce the risk of recurrent stroke. However, no consensus exists about the optimum method for detecting underlying paroxysmal AF not apparent on presentation with stroke.

**Objectives:** We conducted a prospective study to determine if 48 hours of ECG monitoring and pre-discharge holter increased the rate of detection of AF in patients with acute stroke.

**Methods:** Eighty consecutive patients with acute ischemic stroke were placed for ECG monitoring for 48 hours and pre-discharge Holter ECG. Patients who had AF by history or on the baseline electrocardiogram were excluded. ECG was obtained routinely every 4 hours.

**Results:** Among the 80 stroke patients, only 8 patients (10%) were detected to be paroxysmal AF by Holter. Detection of AF was associated with increasing age ( $p$ -value=0.009\*), we find that Patients with AF related strokes were less likely to be smoker and hypertensive compared to those with non-AF-related stroke. Strokes related to AF were more likely to be cortical/subcortical in location. Patients with AF related strokes were more likely to be hypercholesterolemic. Also, we find that Patients with AF related strokes have enlarged left atrium, have lower left ventricular ejection fraction and longer duration of stay in the hospital.

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**Key Words:** Stroke prevention—atrial fibrillation—diagnostic methods—holter.