

Prevalence of silent atrial fibrillation in high-risk patients - preliminary results from a European three-country handheld ECG-screening study

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Introduction: Patients with atrial fibrillation (AF) should in most cases be offered prophylactic anticoagulation treatment to prevent a stroke. However, the arrhythmia can appear without symptoms, so-called silent AF. Even without symptoms AF constitutes a risk for stroke.

Purpose: To screen high-risk patients with diabetes type 2 (DMII) or heart failure (CHF) for silent AF.

Methods: We included patients > 64 years with either DMII or CHF from out-patient clinics and local health centers. Exclusion criteria were known AF, anticoagulation treatment, recent stroke, or an implanted pacemaker or ICD. Patients were recruited from a total of eleven study centers in three countries. All underwent 14-days of intermittent ECG screening with a handheld ECG recording four times each day; the recordings were digitally stored. AF was diagnosed in cases of irregular heart rhythm and absence of P waves on at least one recording (thirty seconds) or on at least two recordings for a minimum of ten seconds.

Results: In total, 813 patients were included, 541 of these with DMII. The mean age was 73,4 years \pm 5,8 SD, 40,7% of the patients were female.

In the DMII group thirteen patients (2.4%) were diagnosed with silent AF and offered anticoagulation. In the CHF group six (2.2%) patients had diagnosed silent AF on the handheld ECG. The prevalence of AF increased with increasing age, see Table 1. Thus, in the youngest group AF was diagnosed in 1.3% of the patients compared to 3.9 % in the age group 75 years or older.

Conclusions: Screening for silent AF in high-risk patients with DMII or CHF seems worthwhile, especially in patients 75 years or older.

Abstract Figure. ECG with atrial fibrillation



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