## **Epidemiology and Management of Atrial Fibrillation in Israel Data from Maccabi Healthcare Services**

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## Background:

Atrial Fibrillation (AF) is the most prevalent of all tachyarrhythmia and is a cause of substantial morbidity and mortality. The data on the prevalence of AF and its associated outcome in Israel is scarce.

The aim of this study is to assess demographic characteristics, current medical management and outcome of patients with AF from a large Israeli cohort obtained from Maccabi Health Services (MHS).

## **Methods and Results:**

Data of 68635 patients, (women 47.5%) with the diagnosis of AF in their medical records or in hospitalization discharge letters from 2003 to 2007, were compared to an age and gender matched control group of patients without AF.

At baseline, AF patients had more comorbidities than patients without AF: Previous myocardial infarction (16.4% vs. 3.7%), previous stroke (8.5% vs. 1.4%), hypertension (80.1% vs. 27.3%) and diabetes mellitus (36.2% vs. 13.3%).

In the AF group calculated CHADS2 score was 0 in 11.7%, 1 in 27.3 % and  $\ge$ 2 in 61%. Oral anticoagulation therapy was prescribed in only 46% of the patients with a CHADS2 score of  $\ge$ 2.

The prevalence during this period, increase according to age of the patients, patients between 25-44 years old the prevalence was 0.16%; patients from 45-54 years old was 0.50%, patients with more than 75 years old the prevalence was 12.45%. The incidence also increase according to the age, between 55-64 years old the incidence was 0.20%, more than 75 year old the incidence was 1.23%

During 5 year of follow up all-cause mortality was higher in AF patients compared to age and gender matched patients without AF; the survival rate in patients without AF was 91% vs. 71% in patients with AF (p<0.001). Among the AF group of patients men had higher survival rates than women; 72% vs. 68%. Within the group of patients without AF no differences were seen in survival rates between men and women; 93 % vs. 94%.

## **Conclusions:**

The incidence and prevalence of AF in Israel is higher than developed countries, increasing progressively with age. Patients with AF had a reduced survival as compared to patients without AF and women had lower survival than men. The use of oral anticoagulation in eligible AF patients was low, explaining the high rate of previous stroke registered in this group.