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Atrial fibrillation in elderly patients: prevalence and comorbidity in general practice

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Patients with atrial fibrillation have an increased risk of thromboembolic complications and mortality.¹ To estimate the impact of prophylactic treatment in the general population it is important to know the prevalence of atrial fibrillation in primary care. Epidemiological surveys have reported different prevalence rates, probably because of differences in study populations and methods.^{1,2} Generally, the risk of stroke in patients with atrial fibrillation may be significantly reduced, but treatment advice for individual patients depends on comorbidity and its consequences.³ Therefore, it is important to identify features that influence prognosis in such patients. The aim of this study was to estimate the prevalence of atrial fibrillation and comorbidities among elderly patients in general practice.

Methods and results

Prevalence and comorbidity were studied in patients aged 60 years or over with atrial fibrillation, who were screened for the PATAF (primary prevention of arterial thromboembolism in patients with atrial fibrillation) study.⁴ The participating general practitioners examined all elderly patients visiting their practices: they took their pulse and, when irregular, made an electrocardiogram. When atrial fibrillation was present a medical history was taken and laboratory tests performed. Ten practices took part (18 general practitioners, total population 40 185), and additional methods were used to identify all patients with atrial fibrillation: all medical records (in practices, hospitals, and pharmacies) were checked, and those patients aged over 60 who had not visited their general practitioner in the previous year were invited to the practice for screening. Almost 90% of the population was screened. Patients who were known to have paroxysmal atrial fibrillation were also

registered. Since the age-sex distribution of each practice was known, age and sex specific prevalences could be computed.

Comorbidity was studied in patients with atrial fibrillation (n = 1234) identified in the first year of the study by all general practitioners participating at that time. The prevalence of angina pectoris, myocardial infarction, hypertension (a systolic pressure >160 mm Hg or diastolic >95 mm Hg at examination), previous stroke, transient ischaemic attack, diabetes mellitus, and hyperthyroidism was compared with that in a population of 11 288 subjects without atrial fibrillation. These patients were registered in 15 practices (47 general practitioners) belonging to the computerised registration network of family practices⁵ and were representative of the regional general practice population without atrial fibrillation. Multiple logistic regression analysis was performed to calculate age and sex adjusted odds ratios for the relation between atrial fibrillation and the mentioned disorders.

The prevalence of atrial fibrillation was 5.1% (95% confidence interval 4.6 to 5.6). Among those aged 60-69 it was 2.8% (women 2.3%, men 3.3%), those aged 70-79 6.6% (women 6.3%, men 7.0%); and those aged 80 and over 10.0% (women 8.7%, men 12.1%). Figure 1 shows the distribution of comorbidity in patients with atrial fibrillation and the control population. All age-sex adjusted odds ratios for atrial fibrillation were significantly greater than 1.0. Looking for interactions with age, we found that odds ratios for myocardial infarction, transient ischaemic attacks, and stroke were greater among women and those for hyperthyroidism and diabetes mellitus greater among men.

Comment

The prevalence of atrial fibrillation increases with age and is higher in men. Our data also show that in patients with atrial fibrillation, even in a primary care setting, comorbidity is common. Therefore treating these patients is complex. In individual patients interactions between antithrombotic treatment and treatment for other conditions may occur, and contraindications may conflict with indications. In further studies, therefore, the complex interactions between risks related to atrial fibrillation, prophylaxis of atrial fibrillation, and treatment of comorbidity need to be evaluated.

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Fig 1—Comorbidity in patients with atrial fibrillation and controls