

Therapeutical Features of Permanent Atrial Fibrillation in Hypertensive Elderly Patients

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Introduction: The atrial fibrillation is a form of arrhythmia, which occurs most frequently among the aged and which often influences the therapy prescribed to them.

Material and methods: The present study addresses to a focus group of 79 hypertensive elderly patients, hospitalized at the Internal Medicine Clinic of Targu Mures during the year 2007. The parameters taken into consideration were distribution by age groups, gender, the existence of atrial fibrillation or other comorbidities and the administrated therapy.

Results: The distribution by age groups and gender reveals a higher number of hypertensive patients between 70 and 75 years and a more frequent affection of male patients. The associated comorbidities to our group of 28 patients with atrial fibrillation were cardiac ischemic disease (13 patients), heart failure (2 patients), both of these (6 patients) and chronic obstructive lung disease (7 patients). The medication administrated for the rate control consists of: beta-blocker in almost 50% of cases (13 out of 28 patients), digitalis (2 patients), and beta-blocker+digitalis for 6 patients. In 7 cases the rate control medication was not required.

Conclusions: The atrial fibrillation is a common condition among the hypertensive elders, and not infrequently associated with other cardiac comorbidities which contribute to the choice of appropriate medication.

Keywords: atrial fibrillation, high blood presure

Introduction

Atrial fibrillation (AF) is a common arrhythmia that is found in 1 percent of persons older than 60 years and in more than 5 percent of patients older than 69 years [1].

A history of congestive heart failure, valvular heart disease and stroke, left atrial enlargement, abnormal mitral or aortic valve function, treated systemic hypertension, and advanced age are independently associated with the prevalence of atrial fibrillation [2].

Three important aspects of atrial fibrillation are treatable contributing factors, that is: control of the ventricular rate, prevention of recurrences, and prevention of thromboembolic episodes.

In this study we aim to assess the role of atrial fibrillation in choosing the right medication in elderly hypertensive patients.

Material and method

It is an observational retrospective study carried out in the year 2007.

The inclusion criteria refer to elderly patients (over 70 years), with hypertension (HBP) associated or not with permanent atrial fibrillation, hospitalized at the Internal Medicine Clinic of Tîrgu Mureș. The parameters described were distribution by age groups, gender, the existence of atrial fibrillation or other comorbidities, and the rate control therapy administrated.

Results

Out of the 416 patients hospitalized at the Internal Medicine Clinic of Tîrgu Mureș in the year 2009 only 79 matched the criteria of the present study.

The distribution by age groups and gender reveals a higher number of hypertensive patients between 70 and

75 years and a more frequent affection of the males (54 out of 79 patients) (Figure 1).

In more than one third of cases (35.44%), the atrial fibrillation steering the hypertension and affects the male population at a rate of 60.71% (Figure 2).

The associated comorbidities to our group of 28 patients with atrial fibrillation were cardiac ischemic disease (13 patients), heart failure (2 patients), both of these (6 patients) and chronic obstructive lung disease (7 patients).

The medication administrated for the rate control consists of: beta-blocker in almost 50% of cases (13 out of 28 patients), digitalis (2 patients), and beta-blocker + digitalis for 6 patients. In 7 cases the rate control medication was not required (Figure 3).

Discussions

Many studies stressed that atrial fibrillation occurs more commonly in men than in women [1,2]. Alike, our study put forward the conclusion that the association between

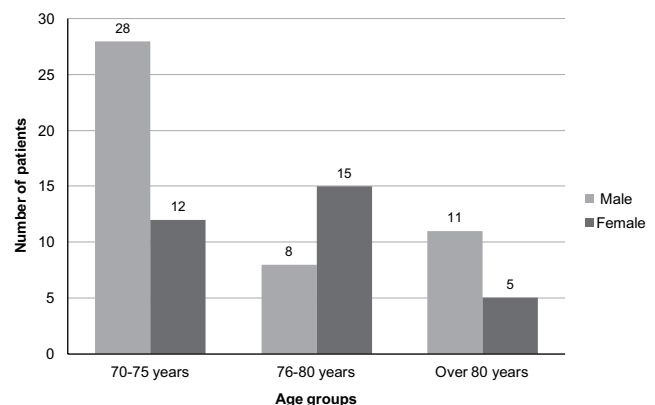


Fig. 1. Distribution by age groups and gender of elderly hipertensive patients

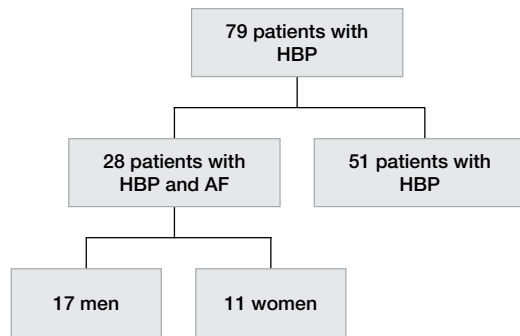


Fig. 2. Association between atrial fibrillation and high blood pressure

the atrial fibrillation and hypertension in elderly patients is more common for males.

For the rate control strategy, digitalis, calcium channel blockers (diltiazem and verapamil) and beta blockers can be used alone or in combination. For chronic management, digitalis is usually insufficient for adequate rate control during periods of exertion [3,4,5].

Medication was chosen depending on the associated comorbidities with atrial fibrillation. When cardiac ischemic disease was present, we administered beta blockers, digitalis in case of heart failure and both medication when these two diseases were associated. Patients with chronic obstructive lung disease received non-dihydropyridine calcium channel blockers (diltiazem and verapamil).

The most commonly applied medication for the rate control to our patients carried beta-blocker or beta-blocker + digitalis.

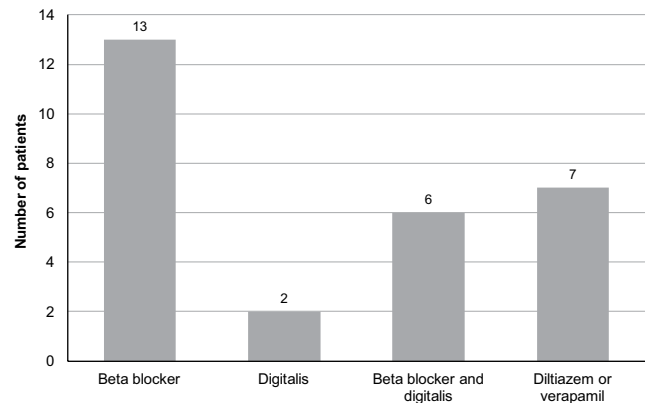


Fig. 3. Rate control medication

Conclusions

The atrial fibrillation is a common affection for the hypertensive elderly patient, which significantly influences the prognosis of the disease and requires in most cases rate control therapy depending on associated comorbidities.

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