“Pill in the Pocket”: How Effective and Safe Is this Strategy for Treatment of Recurrences of Atrial Fibrillation?

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Introduction

Atrial fibrillation (AF) is a very common type of arrhythmia, which is considered to be the most frequent arrhythmia leading to hospital admission [1]. Several substrates underlie this arrhythmia, and different mechanisms are involved in its onset: it is a clinical challenge because there are several diagnostic and therapeutic options, making it a money- and time-consuming entity.

In the era of rationalization of healthcare costs, a strategy of outpatient management of patients with recurrent AF should be considered. This option requires a careful selection of low-risk patients who can be trained in recognition of the symptoms of AF and in administration of the therapy following confirmation that this therapy is safe. No pharmacological strategies have proved effective in reducing the frequency of readmissions to hospital.

In most cases AF is considered a benign clinical entity, so that in the choice of a “home-care” strategy safety is the first issue that clinicians and practitioners should consider.

The clinical experience recorded so far with different pharmacological strategies is reviewed below.

Oral Antiarrhythmic Therapy in AF

At present several pharmacological options are available for outpatient treatment of AF paroxysms.

Quinidine

This agent has long been considered the treatment of choice in AF, with success rates ranging from 30% to 90% in different series (mean 70%) and a mean
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time to recovery of sinus rhythm of 6 h [2, 3]. Because of its capability to facilitate conduction through the A-V node, quinidine needs to be given in association with agents that slow A-V conduction (typically digoxin). Use of this class IA agent is limited by the relatively high incidence of side effects: gastrointestinal disturbances may occur in up to 40% of cases, while a pro-arrhythmic effect has been demonstrated in about 4% of patients, with major arrhythmias occurring up to 48 h after the recovery of sinus rhythm [4]. These side effects limit the use of quinidine in a protected, hospital setting.

**Flecainide**

Several studies have demonstrated the efficacy of this class IC agent to restore sinus rhythm when administered intravenously, with success rates ranging from 60% to 90% [5–9] (Table 1).

The favorable pharmacological profile of the drug, with a good oral absorption, suggests that flecainide may be considered for oral outpatient therapy.

In a population of 37 consecutive patients with paroxysmal AF our group has shown the higher efficacy of a single oral loading dose of 200 mg of flecainide in restoring sinus rhythm (95%) than of placebo (21%); none of our patients experienced adverse effects [10]. We have demonstrated that flecainide (300 mg) is more effective than amiodarone (1,800 mg/day) in restor-

<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of study</th>
<th>No. of patients</th>
<th>Dose</th>
<th>Efficacy (%-time)</th>
<th>Adverse events</th>
</tr>
</thead>
<tbody>
<tr>
<td>[5]</td>
<td>Double blind, controlled</td>
<td>102</td>
<td>2 mg/kg</td>
<td>57-1 h, 67-6 h</td>
<td>Hypotension (11); TdP (1)</td>
</tr>
<tr>
<td>[6]</td>
<td>Comparative</td>
<td>90</td>
<td>2 mg/kg</td>
<td>96</td>
<td>Hypotension (2); A-V block (4)</td>
</tr>
<tr>
<td>[7]</td>
<td>Comparative, controlled, cross-over</td>
<td>80</td>
<td>1.5 mg/kg in 15 min</td>
<td>92</td>
<td>Hypotension (2); A-V block (1)</td>
</tr>
<tr>
<td>[8]</td>
<td>Comparative, prospective</td>
<td>30</td>
<td>2 mg/kg in 10 min</td>
<td>80</td>
<td>Hypotension (2); A-V block (1)</td>
</tr>
<tr>
<td>[9]</td>
<td>Comparative, double blind, controlled</td>
<td>98</td>
<td>2 mg/kg</td>
<td>59-2 h</td>
<td>Hypotension (8); A-V block (1)</td>
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TdP, Torsade de pointe