The patient with hypertrophic cardiomyopathy has a family

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Propafenone contraindicated in the elderly?

To the Editor With great interest we read the paper by Alboni et al.1 The investigators studied intravenous class Ic antiarrhythmic drug (AAD) administration (propafenone and flecainide) as a predictor for adverse effects when used in a ‘pill-in-the-pocket’ regimen (PITP).

Alboni and colleagues suggest that intravenous administration of flecainide or propafenone for pharmacological conversion of atrial fibrillation to sinus rhythm cannot predict the occurrence of adverse effects when these agents are subsequently used in a PITP treatment modality. In fact, intravenous AAD administration was accompanied by a 6% incidence of serious adverse effects when the AAD was used as an oral compound, particularly with propafenone. The authors concluded that clinical intravenous drug testing should not be used as a safety indicator for PITP approach.

First, the pharmacological and pharmaco-kinetic profile of flecainide differs from propafenone, particularly with respect to the intrinsic adrenergic receptor blocking actions.2,3 As the authors mentioned in the discussion section, only propafenone caused serious side effects requiring hospital admission. In addition, in the majority of cases these side effects were related to bradyarrhythmic phenomena. In our opinion, this is a very important observation with clinical implications. Second, the observed bradyarrhythmic side effects of propafenone only occurred in elderly, at least one SD above the mean study population age. In this age group latent sick sinus syndrome may be present and may become manifest by using drugs with intrinsic β-blocking properties (eg, propafenone). Did the authors consider further specifying the study conclusion for octogenarians, or use 24 h Holter criteria before intravenous infusion to preselect subjects with increased risk for bradyarrhythmic complications? Third, might the simultaneous use of other cardiovascular agents like ARBs, ACE inhibitors or β-blocking agents have interfered with propafenone in causing bradyarrhythmic or hypotension-related side effects?

In our opinion, the take-home message that intravenous drug testing in general, should not be used to predict PITP adverse effects, is not demonstrated by the current data. Rather, the current data emphasise that further investigations are necessary to specify patient selection criteria for safe PITP use with propafenone in the treatment of paroxysmal atrial fibrillation.

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Competing interests None.

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The Authors’ reply We thank Drs Kirchhof, Crijs and van Gelder1 for their interest in our paper2 referring to ‘pill-in-the-pocket’ treatment of recent-onset atrial fibrillation (AF). The study was interrupted on the recommendation of the data- and safety-monitoring committee because the results suggested that the intravenous administration of flecainide or propafenone does not predict the occurrence of adverse effects after a loading oral dose of these drugs. A 5% incidence of major side effects during the first out-of-hospital treatment was regarded as high, considering that such patients have haemodynamically well-tolerated episodes of AF. All the patients showing major side effects during the first loading oral dose were receiving treatment with propafenone. No patient receiving flecainide had major adverse effects; however, only 20 patients were receiving treatment with this drug. This patient population is too small to draw conclusions about whether tolerance to intravenous administration of flecainide may predict the safety of the pill-in-the-pocket treatment. We wrote3 that “further data on longer population samples should be collected in order to assess the predictive ability of an intravenous testing with flecainide”. We agree with Dr Kirchhof et al. that the bradyarrhythmias observed after a loading oral dose of propafenone may be an expression of a latent sick sinus syndrome. The four patients showing major adverse effects during the first out-of-hospital treatment were about 70 years old and this suggests that the pill-in-the-pocket treatment cannot be indicated in the elderly because in this age group latent sick sinus syndrome may be more common. However, because of the premature interruption of the study, the patient population is too small to draw any conclusion.

We carried out the study because the pill-in-the-pocket approach is underused since the guidelines3 recommend an in-hospital loading oral dose of flecainide or propafenone as a screening for the out-of-hospital self-administration, but the doctors of the emergency rooms prefer intravenous administration, which has a more rapid action than the time-consuming oral administration. In the real world, the recording of 24 h ECG before intravenous administration of the drug is not feasible; moreover, we believe that a prolonged ECG recording during AF is not useful to identify patients with latent sick sinus syndrome. Only seven patients were treated with β blockers and none took verapamil or diltiazem. None of the four patients showing major adverse effects during the first out-of-hospital treatment took β blockers. We did not report the use of ACE inhibitors and angiotensin receptor blockers because in the first pill-in-the-pocket study4 no correlation between the use of these drugs and major side effects was seen. In our opinion, present knowledge suggests that patient’s tolerance for intravenous administration of propafenone does not seem to predict adverse effects during out-of-hospital self-administration of this drug. At present, a predictive ability of intravenous testing with flecainide is not yet proved.

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Competing interests None.

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The patient with hypertrophic cardiomyopathy has a family

To the Editor We have read the paper on hypertrophic cardiomyopathy (HCM) by ten Berg et al with great interest.1 As the paper
has an educational aim, we would like to address some minor misconceptions that could have major implications.

Genotyping in HCM to establish a molecular diagnosis in HCM patients can indeed probably not be used to guide prognosis or therapy. However, it has been proved to be a more cost-effective strategy than cardiac screening to identify relatives at risk. This is mainly due to the inability of ECG and echocardiography to exclude HCM, which is possible by genotyping, because contrary to what the authors state hypertrophy develops in the subset of carriers develops hypertrophy late in life is low. We appreciate the additional information that it is probably not sporadic mutations but the influence of modifier genes on the autosomal inherited trait that explains the heterogeneity of the penetrance of HCM.

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Competing interests None to declare.

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The Authors’ reply
We thank Christiaans and coworkers for their critical review of our paper on hypertrophic cardiomyopathy (HCM).1 We fully agree—as is stated in our paper—that genotyping is useful to identify relatives at risk while ECG and echocardiography are often unable to exclude HCM. As we also stated, it is recommended to repeat ECG and echocardiographic evaluation every 5 years even in adults without hypertrophy because hypertrophy can develop after the end of adolescence. In our experience, however, the incidence of patients developing hypertrophy late in life is low. We appreciate the additional information that it is probably not sporadic mutations but the influence of modifier genes on the autosomal inherited trait that explains the heterogeneity of the penetrance of HCM.

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Competing interests Marco Cattaneo participated to advisory board meetings and received lecture honoraria from AstraZeneca, Eli Lilly-Daiichi Sankyo.

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What is the best dose of aspirin in association with P2Y12 antagonists?

To the Editor
In their Viewpoint article, Warner et al hypothesised that the administration of aspirin to patients who are treated with potent antagonists of the platelet P2Y12 receptors might increase cardiovascular risk. The authors’ hypothesis is based on the observation that P2Y12 antagonists inhibit the platelet production of thromboxane A2 (TXA2) (which would render the use of aspirin superfluous), and on the consideration that aspirin may cause adverse effects. It is my opinion that there is no evidence yet to suggest that aspirin is superfluous or even detrimental when administered in combination with P2Y12 antagonists. In fact, the inhibition of TXA2 production by P2Y12 antagonists in mono-
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