

Pill-in-the-Pocket Cardioversion

Patients with Paroxysmal Atrial Fibrillation (AF) i.e. AF that comes and goes often ask their doctor whether it might be possible to take a medication only at the time that they get AF, in order to restore the normal rhythm, rather than taking it all the time to ward off attacks which might only occur rarely. In fact it is not unusual for patients to forget to take medication when they have the normal rhythm and when they suddenly develop AF, they then remember to take the medicines and often, do so at a higher dose than normal. This is not recommended without full discussion with the physician to ensure that it can be safely done.

Only some patients are suitable for the 'Pill-in-the-Pocket' method of treatment. They should:

- be able to recognise the onset of the AF
- have attacks that happen no more frequently than at weekly or preferably monthly intervals
- have no significant underlying heart disease
- have no disabling symptoms during an attack (fainting, severe chest pain or breathlessness)
- only use this medication if the patient has symptoms less than 24 hours (if longer may cause a clot in the heart with possible complications)
- be on beta-blockers or rate limiting calcium channel blockers for at least 30 minutes prior to taking the "pill in the pocket" (if not already taking these) or may lead to potentially dangerous rate/rhythm problems
- consider the addition of an anticoagulant if sinus rhythm is not gained within 24 hours or other clinical indications suggest its value

The usual way to begin treating a patient in this way is by asking the patient to report to

the nearest Accident and Emergency (A&E) Department as soon as possible after the onset of an attack. The patient will have been given a letter to inform the A&E staff about the procedure. A routine 12-lead ECG should be performed to check the rhythm and the general state of the heart. The patient should then be connected to an ECG monitor from which recordings can be taken if needed. The patient will be rested and given the appropriate dose of the antiarrhythmic drug which has been selected for use. This is taken with a small sip of water and the patient then lies down and relaxes, perhaps reading or watching the TV. The staff keep an eye on the situation and the ECG monitor is alarmed to alert the A&E staff of any change of the rhythm. From time to time the blood pressure is taken.

In some cases the technique does not work and the patient is discharged after about four hours, often after being given medication to control the heart rate and with an appointment to see the physician in charge. In most patients the AF does convert to sinus rhythm and the patient is allowed home after an hour of additional ECG monitoring. Provided that the technique was shown to be effective and safe (no abnormal rhythm has developed and the blood pressure has been stable), the patient is then allowed to self administer the same dose of the same medication whenever AF re-occurs remembering to take a beta-blocker or rate-limiting calcium channel blocker at least 30 minutes beforehand otherwise a potentially dangerous rate/rhythm may occur. Progress is monitored in the out-patient department and in conjunction with the family physician.

Acknowledgments: AF Association would like to thank all those who helped in the development and review of this publication. Particular thanks are given to Prof Dhiraj Gupta and Dr Matthew Fay.