Rate versus rhythm management

This factsheet explains the difference between managing the heart rate and treating the heart rhythm of patients with AF.

In patients who suffer with atrial fibrillation (AF) there is a question as to whether it would be in their best interests to be looked after in the new stable rhythm of AF or more appropriate to try to return the heart to its normal ‘sinus’ rhythm. This question is termed ‘Rate versus rhythm management’.

Patients who suffer from AF may have physical symptoms of palpitations, breathlessness, lethargy or reduced exercise tolerance (tiredness at an earlier point of activity) or they may have no symptoms at all. Symptoms may be caused by the high heart rate that some people experience during AF or as a result of the AF itself. Symptoms of AF or indeed the amount of AF that people have does not predict risk of stroke. However, symptoms will determine choices in the ongoing management of AF.

Although it would seem logical that if a patient is returned to their normal sinus rhythm the risk of stroke would return to normal, this has not yet been proved to be the case by evidence from studies. This risk (which is small in young people with structurally normal hearts) would seem to remain increased regardless of the rhythm or symptoms, perhaps because patients get AF that they or their doctor are unaware of. Therefore, the only benefit with rhythm control that we are currently aware of is improvement in quality of life for those patients experiencing troublesome symptoms from AF.

Furthermore, the treatments used for rhythm control (both medications and operations) are more complex and therefore associated with slightly higher risk than rate control treatments. Therefore patients will need enough understanding of the treatment options for rhythm control to decide whether their symptoms justify the treatment.

Many patients who have no symptoms may therefore opt for heart rate control because it is the simplest and safest strategy. On the other hand, those patients who continue to have symptoms despite having good heart rate control may decide that they want heart rhythm control because for them the risks (which are still small) are outweighed by the benefits that rhythm control brings (i.e. relief of symptoms).

For heart rate control, treatment is usually with medications like beta blockers or calcium channel blockers. For heart rhythm control, the options are:

a) pill-in-the-pocket (taking a combination of rate and rhythm control medication when symptoms occur)

b) regular medication (taking rate and rhythm controlling medication regularly)

c) catheter or surgical ablation

Details of these and other treatments can be found in other AF Association information factsheets.

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