

Paroxysmal atrial fibrillation: why patients experience different symptoms from the same arrhythmia?

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ABSTRACT

A careful evaluation and interpretation of the symptoms of the patient with atrial fibrillation should be the first step in selecting a treatment modality. Arrhythmia burden is not equal to symptoms. Some patients will have and continue to have symptoms not related to the occurrence of arrhythmias. Recognition of these patients is important in the treatment of atrial fibrillation.

KEYWORDS

Arrhythmia, atrial fibrillation, thromboembolic symptoms

The success of treatment in a patient with atrial fibrillation depends on a subtle balance between the evaluation and interpretation of the symptoms due to atrial fibrillation in that specific patient and the prevention of thromboembolic complications.

Prevention of thromboembolic complications has recently become quite simple. An indication for oral anticoagulation is present if a patient has a high-risk profile: age above 75 years, or age <75 years with left ventricular hypertrophy and hypertension, a previous transient ischaemic attack or cerebrovascular accident and/or diabetes mellitus. Once the criteria for anticoagulation are met, the patient will have a lifelong need for treatment, irrespective of the rhythm (sinus or paroxysmal, persistent or permanent atrial fibrillation). It can be said: 'once atrial fibrillation, always atrial fibrillation'. The patient with lone atrial fibrillation (no structural heart disease) below the age of

65 should either have no preventive treatment or low-dose aspirin since the risk of thromboembolic complications is very low.¹⁻³

Evaluation of the symptoms of atrial fibrillation should be done systematically. Is the patient having palpitations: are they fast or mainly irregular or does the patient feel both? When does he/she have these palpitations? Is there a relation with exercise or body position (lying, sitting or standing)? Is chest pain or chest discomfort present and when is this feeling most prominent. Is there dizziness or (near) syncope? Is polyuria present when the patient has palpitations? Is there a feeling of fatigue after the atrial fibrillation has stopped and how long does this feeling remain present? Sometimes to your surprise the patient with atrial fibrillation has none of the above-mentioned symptoms at all and the discovery of atrial fibrillation is coincidental. This especially occurs in the elderly patient on routine check-up.

The most invalidating symptom of atrial fibrillation is a decrease in exercise tolerance. This may vary from a diminished peak exercise (during sport/bicycling) to intolerance for slight exercise (walking a flight of stairs or even just walking). Generally, the younger the patient, the more prominent the decrease in exercise tolerance will be.

Whether the treatment of atrial fibrillation will be successful depends on an appropriate interpretation of the patient's symptoms. Why is this so complicated? Patients with clear symptoms of atrial fibrillation do not only have symptomatic episodes of atrial fibrillation but will also have many asymptomatic episodes of atrial fibrillation. This may

even amount to up to 70% of the total burden of atrial fibrillation! In general it might be the case that there is no clear correlation between the number of attacks of atrial fibrillation and the patient's symptoms. Some have recurrent attacks of atrial fibrillation but hardly notice them, or at least are not limited in their daily functioning by these attacks. Others have one or two short-lasting episodes of atrial fibrillation and cannot function in their work or in their social environment! Is this related to the type of personality?

In this issue Van den Berg *et al.* report on whether traits of the personality may be helpful in evaluating the success of treatment of atrial fibrillation.⁴ They investigated whether neuroticism is more frequently present in patients with atrial fibrillation in comparison with age-matched controls. A high score on the neuroticism scale indicates persons who are anxious and may have vague complaints about their health. In the present study patients were included with paroxysmal atrial fibrillation with 'lone atrial fibrillation' or atrial fibrillation in the setting of hypertension. Nearly 70% were males.

Interestingly, they found no differences in the degree of neuroticism in the study group as a whole in comparison with the age- and sex-matched control group. So patients with paroxysmal atrial fibrillation have, on average, a 'normal' degree of neuroticism.⁴ However, in those persons with a high level of neuroticism, social functioning and mental health scored low. This caused a clear negative impact on the quality of life. This negative impact even seemed to be independent of the presence or absence of

atrial fibrillation! In other words: if the arrhythmia burden in patients can be diminished this may not necessarily lead to improvement of quality of life in a patient with a high degree of neuroticism. Evaluation of any intervention for the social functioning and mental health in these patients will be difficult if it is possible at all.

Evaluation and interpretation of the symptoms of patients with atrial fibrillation should be done meticulously. Which symptoms have the greatest negative impact on the patient's quality of life and what are the patient's expectations? One should take time to make a proper evaluation. Only then the appropriate therapy can be selected and both physician and patient can be satisfied with the treatment option that has been selected.

REFERENCES

1. Rockson SG, Albers GW. Comparing the guidelines: anticoagulation therapy to optimize stroke prevention in patients with atrial fibrillation. *JACC* 2004;43:929-35.
2. Van Gelder IC, Hagens VE, Bosker HA, et al. A comparison of rate control and rhythm control in patients with recurrent persistent atrial fibrillation. *N Engl J Med* 2002;347:1834-40.
3. The Atrial Fibrillation Follow-up Investigation of Rhythm Management (AFFIRM) investigators. A comparison of rate control and rhythm control in patients with atrial fibrillation. *N Engl J Med* 2002;347:1825-33.
4. Van den Berg MP, Ranchor AV, van Sonderen FLP, van Gelder IC, van Veldhuisen DJ. Paroxysmal atrial fibrillation, quality of life and neuroticism. *Neth J Med* 2005;63:170-4.