

SUMMARY

Atrial fibrillation (AF) is the most common sustained rhythm disturbance in the adult population, which has received not insignificant attention in recent years. AF leads to the deterioration of atrial mechanical function and it is connected to thromboembolism. Syncope also belongs to AF's clinical manifestation. With regard to the fact that the autonomic nerve system plays a part in the pathophysiology of AF and neurocardiogenic syncope, one of the main aims of the work was to evaluate the occurrence of neurocardiogenic syncope in patients with permanent AF during a head up tilt test (HUTT). Over the course of the HUTT haemodynamic changes were recorded. The influence of medication, history of syncope, heart rate (HR) frequency, echocardiographic parameters and co-morbidities on syncope during HUTT, was also investigated.

No higher incidence of neurocardiogenic syncope was found during HUTT in the group of 48 patients with permanent AF. There was no noticeable effect of the medication, history of syncope, echocardiographic parameters, frequency of the resting HR, 24hour HR frequency and co-morbidities on syncope during HUTT. All patients with syncope during HUTT experienced a vasodepressor type of response. A decrease of 12mmHg in systolic blood pressure within any 5 minute interval during a course of HUTT was a predictor of syncope. There was no statistical difference found in positive and negative orthostatic tests in patients with or without syncope during HUTT, nevertheless a course of the orthostatic test in the sense of systolic and diastolic blood pressure predicted the HUTT result.

Patients with permanent atrial fibrillation on their chronic medication do not seem to be at a higher risk of neurocardiogenic syncope. An incidence of vasodepressor neurocardiogenic syncope definitely dominated in the monitored patients (average age of $67,5 \pm 8$), where orthostatic hypotension might have played a part.