

Results of Trans-Telephonic ECG Monitoring Using Episodic Recorder in Different Clinical Indications

Veronika Bulkova¹, Jan Chovancik², Štěpán Královec¹, Jana Gandalovicova¹, Jiri Brada¹,
Martin Fiala²

¹MDT-Medical Data Transfer s.r.o., Mojzisoava 17, Brno 61200, Czech Republic

²Hospital Podlesi, Trinec, Czech Republic

Tel: 00420725069195

veronika.bulkova@gmail.com

Aims: The study investigated efficacy of longer-term ECG monitoring using episodic recorder with automatic detection in patients with less frequent symptoms. **Methods:** In the year 2010, 376 patients had 383 examinations for syncope (6%), presyncope (7%), palpitations generally (37%), palpitations with supraventricular arrhythmia (SA) suspicion (13%), dyspnea (1%), and as check-up after atrial fibrillation (AF) ablation (36%). **Results:** There were 84753 ECG recordings analyzed (221± 380 recordings/1 monitoring period of 14.6 ± 8.8 days). Diagnosis was obvious on 18464 recordings in 91 (24%) patients. In the categories of syncope, presyncope, palpitations and suspect SA, the finding led directly to diagnosis in 5 (21%), 9 (36%), 17 (12%), and 25 (50%) patients, respectively. Conversely, at the time of symptoms, mere sinus rhythm possibly with premature beats or sinus tachycardia was found in 9 (38%), 9 (36%), 56 (41%), and 5 (14%) patients, respectively. After prior AF ablation, AF/atrial tachycardia recurrence was revealed in 35 (26%) patients (of whom asymptomatic in 17 (49%) patients). **Conclusion:** ECG monitoring with automatic ECG detection directly facilitated subsequent therapy in 24% of patients and excluded serious arrhythmia in another in 33% patients with indications other than check-ups after ablation. Non-invasive monitoring should precede invasive diagnostics particularly in patients with syncope, presyncope, and palpitations without structural heart disease. The work was supported by grant IGA MZ NS10261-3/2009.

Keywords: trans-telephonic ECG, arrhythmias, cardiology