

Abstract

Pulse check in pharmacies I

Author: Michaela Frnková

Supervisor: PharmDr. Kateřina Malá, Ph.D.

Consultant: PharmDr. Anna Rejmanová, Ph.D.

Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University

Introduction: Atrial fibrillation is one of the most common supraventricular disorders of the heart rhythm. Unless properly treated, it leads to higher mortality and morbidity rates. Early detection of such fibrillation, which is often asymptomatic, may prevent further associated complications, especially ischemic stroke, and a sudden cardiac death.

Aim: The thesis focused on the feasibility of involving pharmacists in the screening of the patients with heart rhythm disorders. Further increase awareness of the possibilities and meaning of monitoring heart rhythm disorders in pharmacies and ensure that patients can verify their own heart rate at home.

Methods: The heart rhythm measurements were carried within four weeks (11/2017; 11/2018; 6/2019; 12/2019), during the global health initiative “Know your pulse”. Measuring took place at the pharmacy in Pardubice; the pharmacy offers individual consultations to patients. Participation in the screening for the atrial fibrillation was offered to all incoming pharmacy persons who were older than 40 years and without chronic anticoagulant treatment. The persons were offered manual palpation of the heart rate and measurement on a Veroyal manometer with ECG, assessment of the selected symptoms and risk factors of the ischemic stroke. The patients with an irregular rhythm and estimated elevated risk of thromboembolic complications were recommended to consult with their physician.

Results: The heart rhythm measurements were taken from 145 patients (average age 59.5 ± 11.1 years; 71.0 % women). The most common symptoms were tiredness (56.6 %), shortness of breath (25.5 %) and palpitation (24.8 %); however, 26.9 % of patients were asymptomatic. The average heart rhythm was 75.2 ± 10.9 pulses per minute (min. 52, max. 135); irregular rhythm was detected in 8 (5.5%) of patients. The average CHA₂DS₂-VASc score was 1.8 ± 1.3 . Eight patients (5.5 %) were recommended to consult with physician.

The feedback was provided by 3 (2.1 %) of patients, who were subsequently diagnosed with disorder of heart rhythm – 1 patient with atrial fibrillation (0.7 %) and 2 (1.8 %) patients with atrial flutter.

Discussion and conclusions: Occasional screening for the atrial fibrillation of nearly 150 patients led to a discovery of 5.5 % patients with potential risk of this disorder. Subsequent medical examination confirmed the disorder with 2.1 % patients. Involvement of pharmacists in the screening process seems to be a useful tool, as the pharmacists could meet a greater part of the population. However, even a greater efficiency might be achieved with a multidiscipline cooperation and support.

Key words: pharmacist, atrial fibrillation, pharmacy, pulse check, screening