

Physical exercise and heart rate variability

Laura Poantă¹, Mioara Budiu², Adriana Albu¹

¹ *Iuliu Hațieganu University of Medicine and Pharmacy, Cluj-Napoca*

² *Emergency Clinic County Hospital, Cluj*

Abstract

Heart rate variability (HRV) measures the beat-to-beat variations on electrocardiogram recordings. HRV is regarded as an indicator of the activity of autonomic regulation of circulatory function; at the same time it has a proven utility for mortality prediction after acute myocardial infarction. A depressed HRV strongly and significantly correlates with higher mortality, especially through arrhythmias. On the other hand, physical exercise is more and more analyzed through cardiovascular pathology, both in primary prevention among sedentary subjects, and in secondary prevention, in comprehensive rehabilitation programs. In this article we discuss the present knowledge regarding physical exercise, its place and role in different types of individuals, from healthy sedentary people, to patients with coronary syndromes, and its connection with HRV.

Key words: heart rate variability, physical exercise, cardiovascular disease.