

## OPIS PRZYPADKU / CASE REPORT

Otrzymano/Submitted: 16.02.2017 • Zaakceptowano/Accepted: 20.03.2017

© Akademia Medycyny

### ***Prehospital electrical cardioversion of haemodynamically unstable supraventricular tachycardia – a case report in the aspect of newly introduced Polish emergency services regulations***

**Marek Dąbrowski<sup>1,2</sup>, Agata Dąbrowska<sup>1,2</sup>, Marcin Zieliński<sup>1,3</sup>,  
Wojciech Telec<sup>1</sup>, Łukasz Szarpak<sup>2,4</sup>, Maciej Sip<sup>1,2</sup>**

<sup>1</sup> Department of Rescue and Disaster Medicine, Poznan University of Medical Sciences, Poland

<sup>2</sup> Polish Society of Medical Simulation, Poland

<sup>3</sup> Voivodeship Emergency Medical Services, Poznan, Poland

<sup>4</sup> Department of Emergency Medicine, Medical University of Warsaw, Poland



## Abstract

**Background.** European and American resuscitation guidelines show clearly that electrical cardioversion is a necessary procedure in unstable tachycardia. The scope of medical emergency procedures a paramedic can perform in accordance with the Ministry of Health regulations to perform electrical cardioversion in hemodynamically unstable tachycardia. The scientific societies guidelines (2010 and 2015) such as the ERC or AHA promoting advanced life-saving procedures confirms that the participant of even a limited hours training is able to acquire skills related to diagnosis and treatment of unstable SVT through the exercise to perform an urgent electrical cardioversion. **Case Report.** A basic Emergency Medical Team (ZRM) consisting of a paramedic and a nurse was called to the 52-year-old woman due to a fainting in public area. Patient was in unstable condition and his ECG presented SVT. Decision for treatment was synchronized shock. **Results.** The procedure was carried out by synchronized with the R-wave discharge using biphasic energy of 100 J. The procedure was performed without any complications. Upon delivery of a first preferred dose of energy the desired therapeutic effect (sinus rhythm restoration) was obtained. In the re-assessment of vital signs immediately after the procedure a marked improvement in hemodynamic parameters, resolution of the hypoperfusion signs and no symptoms of early complications were observed. Changing the regulations allowing paramedics to perform urgent intervention, for which the implementation time has a great impact on survival of the patients. The authors demonstrate the validity of such procedure and with the appropriate training of medical staff paramedics can perform DCC safely and effectively. *Anestezjologia i Ratownictwo 2017; 11: 41-44.*

**Keywords:** *unstable tachycardia, cardioversion, synchronized shock, resuscitation*