

Standardized protocol for Acute Coronary Syndrome Network in Western Slavonia Region

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The acute coronary syndrome (ACS) network is a complex system of concern for patients with acute coronary syndrome. In order to provide adequate patient care, reduce total mortality and irrational costs of treatment, we need varied algorithms and a patient concern protocols. Outhospital emergency medical services, intrahospital emergency rooms, and coronary care units in percutaneous coronary intervention (PCI) and nonPCI centers participate in the care of ACS patients.¹ Therefore, only algorithms adapted to each of these levels can improve the protocol for patient care. By standardized protocol implementation since January 2016, we compared the results with respect to the total number of patients before the protocol was applied.

We analyzed the total number of patients, the relationship between the number of transferred and non-transferred patients, the intra-hospital mortality as well as the total mortality for ST-elevation myocardial infarction (STEMI) and non-ST elevation myocardial infarction patients (NSTEMI). The results show that the standardized protocol increases the total number of PCIs in patients with ACS, namely 36% for STEMI and 20% for NSTEMI. However, the total mortality of STEMI patients has increased from 5.2% to 6.9%, which is a consequence of an increased number of patients with cardiogenic shock (2.5% to 7.8%), as well as inappropriately high rates of transfer time from nonPCI hospitals (average time was 160min). In patients with NSTEMI we recorded an increase in the total number of patients by 20%, while total mortality rate has not been changed. However, we should point out a favorable trend in the increase of PCI within 72 hours in NSTEMI patients.

The standardized protocol, along with other organizational improvements, has led to the primary goal of increasing the number of primary PCIs in STEMI and PCI at ACS-NSTEMI at an early stage. It has also revealed the need for additional effort to increase the quality of treatment in terms of reducing patient delay time, proper recognition of STEMI by the outhospital emergency services, as well as the need to reduce transport time for transferred patients. If a transfer within 120 minutes cannot be provided we recommend pharmacoinvasive approach to be applied.

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LITERATURE

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