

# METABOLIC THERAPY IMPACT ON THE MANIFESTATION OF ARRHYTHMIA IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

**Tamar Svanidze, I Mamatsashvili and T Saralidze**

Tbilisi State Medical University, Georgia

**A**rrhythmia often accompanies ST-segment elevation acute myocardial infarction (STEMI) becoming a challenging problem. Myocardial injury depends on impaired myocardial perfusion and metabolic state as well. Our aim was to diminish development of arrhythmias in STEMI by improving myocardial glucose utilization. We used metabolic therapy (MT) with Trimetazidine and polarizing solution of GIP just from the first day of STEMI. Evaluation of heart function was based on ECG, Holter monitoring and echocardiography before and after treatment. We observed 50 patients with STEMI without diabetes who did not undergo reperfusion therapy because of different reasons. HF did not exceed Killip class II. All were treated with standard therapy, 30 of them (I group) additionally were treated with Trimetazidine MR 35 mg p/o twice a day for a month and polarizing solution of GIP ( 25% glucose-1000 ml, 50 IU insulin, 4% KCl-144 ml) i/v in the first 24 hours after STEMI diagnosis. 20 patients represented II-control group. In group I before treatment, life-threatening arrhythmias were observed in 26.67% (8 patients), prognostically indifferent arrhythmias (PIA) were revealed in 33.34% (10 patients) and 12 patients presented without any arrhythmia. After ten days of treatment appearance of arrhythmia was significantly decreased. Life-threatening arrhythmia was revealed in one patient (3.34%) and PIA was revealed in two patients (6.67%). In control group, before treatment life-threatening arrhythmias were observed in 25% (5 patients) and PIA were revealed in 35% (7 patients). After 10 days of only standard treatment, appearance of arrhythmia was also decreased, but less than in the group I treated with MT. Life-threatening arrhythmia was revealed in three patients (15%) and PIA was revealed in four patients (20%). Inclusion of MT with Trimetazidine and polarizing solution of GIP in standard treatment of STEMI decreases development and appearance of both life-threatening and prognostically indifferent arrhythmias.

tatiasvanidze@gmail.com