APPLICATION MELDONIUM IN REHABILITATION OF PATIENTS WITH CHRONIC PANCREATITIS CONCOMITANT WITH STABLE CORONARY ARTERY DISEASE

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CP is one of the most common diseases of the pancreas with high cases of temporary disability and primary invalidity (up 15.0 %) characterized by the progressive course with the growing of functional insufficiency of the pancreas and development of disturbances in the prooxidant-antioxidant system and the emergence of trofological failure (TF) [1, 2]. Development of TF contributes to the progression of CP and its complications [3, 4]. In the current TF there is a deficiency of microelements and vitamins that underlying the decrease in function of antioxidant system (AOS). During CP takes place an activation of lipid peroxidation (LPO), which leads to the progression of fibrosis and parenchymal atrophy [5, 6].

It was found that in 15.5 % of patients with gastroenterological diseases, including pancreatitis, occurs stable coronary artery disease (SCAD). The combination of CP and SCAD leads to a number of structural and metabolic changes that affect the progress of both diseases, and necessitates the development of a systematic approach to the study of these disorders in this group of patients [7, 8]. The standard basic therapy comorbidity CP and SCAD not include correction of trophological and prooxidant-antioxidant disorders [9, 10]. In recent years it has become common in medical practice destination of metabolic drugs – like meldonium. It belongs to the partial fatty acid oxidation inhibitors. The mechanism of action of meldonium is associated with a return rate limiting biosynthesis of carnitine with its predecessor – gamma-butyrobetaine, so meldonium influences on changes in trophological and prooxidant-antioxidant status [11].

**The purpose** was to investigate the effectiveness of a course of treatment of meldonium with sequential introduction to the correction of trophological and prooxidant-antioxidant disorders in patients with comorbid course of CP and SCAD.

**Material sand methods.** The study included 90 patients with CP combined with SCAD who were divided into two groups (depending on treatment programs): I group (45 patients) received the standard treatment (ST); II group (45 patients) except ST received drug meldonium (Vazonat) with sequential introduction as follows: first grade – 5 ml intravenous bolus injection 1 per day for 10 days; the second stage – the introduction meldonium electrophoresis on a part of the left upper quadrant a day for 15 days; third degree – taking the drug further 2 capsules 1 time per day for a month.

**Results.** After treatment malonic aldehyde level in I group significantly decreased by 1.40 mcmol/l (22.05 %), while in II group this date was significantly decreased by 2.22 mcmol/l (34.75 %). Also after treatment was observed a more considerable significant increasing of superoxide dismutase activity (by 24.98 %) and the increasing of SH-groups (by 15.81 %) in the II group, while in the I group, these datas increased slightly and unreliable. The level of catalase in serum before treatment in I and II groups of patients was significantly higher compared to control ((55.72±1.12) % and (55.77±1.03) % respectively). After treatment this indicator was significantly decreased by 16.22 % in the I and by 30.68 % in the II group that once again proves the antioxidant properties of meldonium. Also it was established a significant increase of hemoglobin level in I group from (101.17±1.87) g/l to (107.58±1.28) g/l and increase of red cells level in blood (8.48 %), while in II group there was a significant increase the level of hemoglobin from (100.64±0.55) g/l to (118.38±1.23) g/l, the level of red cells in blood increased by 19.69 %.

**Conclusions.** It has been shown that the addition to the treatment of patients with comorbidity CP and SCAD meldonium with sequential introduction is more conducive to improving the performance and trophological pro-oxidant-antioxidant states than the standard basic therapy.

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