FAST-TRACK SURGERY IN SEVERE ACUTE PANCREATITIS USING THE TACTICS STEP-UP APPROACH

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ABSTRACT: SOn the current day acute pancreatitis (AP) is one of the most common surgical problems and causes major morbidity and mortality. According to global estimates, the incidence of AP was shown to be 33-74 cases per 100 000 person-years and a mortality of 1-60 per 100 000 person-years due to AP. The severity of AP can either be mild, moderate or severe, which depends on the extent of local injury in and around the pancreas, and more importantly systemic injury to remote organs. Severe form of the disease seen in around 20% of all patients with AP is associated with significant local complications in the form of necrosis and often systemic injury due to systemic inflammation [1-15].

The main type of treatment of AP is complex conservative therapy and surgery in the presence of indications for it. Since 2010, the world community of pancreatologists has initiated the introduction of a "step-up approach" tacticks to the surgical clinic. The use of minimally invasive techniques in the complex treatment of AP is becoming more common. The application of the "step-up approach" tacticks in clinical practice is closely intertwined with the implementation of the concept of multimodal rehabilitation of surgical patients through the implementation of the protocols Enhanced Recovery After Surgery (ERAS) or "fast-track surgery". This helps to reduce the cost of treatment without compromising its quality. The ERAS concept envisages a set of measures in the peri- and postoperative period aimed at reducing the time of hospitalization and rehabilitation after surgery. Since patients with AP are the category of patients who most often need long-term and costly inpatient treatment, attempts to implement the concept of ERAS during their treatment are relevant and cost-effective.

To improve the results of surgical treatment of patients with AP using the "step-up approach" tactics, and justify the feasibility of implementing the concept of "fast-track surgery" in surgical practice using the example of these patients [14,15].

Matherials and Methods. The results of the treatment of 103 (22-70 ages) pts with AP who were treated by the principles "step-up approach" in the surgical department of the Municipal non-commercial enterprise of the Kharkov regional council «Regional Clinical Hospital» 2015 to 2020 were analyzed. All patients were divided into two groups: the main (56 pts) and the comparison group (47 pts). We used puncture, puncture-drainage under ultrasound, computer navigation, laparoscopic interventions and local open methods of surgical intervention. In the main group, the tactics of the "step-up approach" were applied and the principles of the ERAS concept (2018-2020) were implemented. In the comparison group (2015-2017), the ERAS principles were not implemented.

All patients were examined. General clinical methods of blood and urine tests, biochemical blood tests, determination of endotoxicosis markers were performed. Instrumental examinations were performed as well: ultrasound examination of the abdominal cavity organs, multispiral computed tomography with contrasting 72 hours after admission to the hospital, chest and abdominal radiography, bacteriological examination. Also, the diagnostic program of patients in the main group included the determination of blood lactate as a marker of tissue hypoperfusion and acid-base balance of the body, determination of the level of I-FABP (fatty acids binding protein-intestinal). The APACHE II and SOFA scores were used to assess the severity of the condition of patients in both groups, as well as to predict mortality.

Results. In the main group along with appropriate conservative treatment 30 (54%) pts underwent video-laparoscopy, pancreatonecectomy, sanitation and drainage of the omental sac. In 4 (7%) cases this intervention was supplemented by lumboscopy and retroperitoneal drainage. Laparoscopic cholecystectomy, sanitation and dranage of the omental sac were performed in 7 (12.5%) pats, and in 3 of them the operation was completed by external drainage of the choledochus. In 7 (12.5%) pts, the scope of intervention included videolaparoscopy, opening, sanitation and drainage of parapancreatic fluid collection. In 4 (7%) cases videolaparoscopy with cholecystostomy, sanitation and drainage of omental sac were performed. In 3 (5%) pts underwent local lumbotomy on the left, sanitation and drainage of the retroperitoneal space. In 1 (2%) pt diagnostic videolapascopy was performed, and then due to the impossibility of conducting an adequate revision, local mini-laparotomy, pancreatonecectomy, and drainage of omental sac. In the comparison group, we used laparoscopic necrectomy in 29 (62%) patients). Only 18 (38%) patients used puncture-drainage interventions under ultrasound navigation. All pts were operated after two weeks on the onset of illness.

The principles of the ERAS concept were applied in the main group during the whole period of treatment of patients. The length of treatment of patients after surgery in the intensive care unit was minimized, immediately after the compensation of vital functions the pts were transferred to the surgical department. Activation of pts began on the first day of the postoperative period, and on the third they were already fully mobile. This became possible through the active involvement of the physiotherapy service in the treatment process. Intaking of clean fluids was possible in the first or second postoperative day. The average length of treatment of the pt in the surgical department were 14.6 bed-days. The treatment program of pts from the comparison group who were treated from 2015 to 2017 did not include the principles of "fast-track surgery" and the average length of treatment of such pts in the surgical department were 20.4 bed-days.

Biography:-

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