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## **PREDICTION OF POSTOPERATIVE COMPLICATIONS IN PATIENTS WITH PERITONITIS**

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The complexity of the complex treatment of abdominal sepsis and post-operative complications maintain the mortality rate in diffuse peritonitis at the level of 30-66% [1, p. 491]. Despite the prominence of the main areas of treatment peritonitis: early hemodynamic support, source control and anti-microbial therapy [2, p. 3]. At the moment, many prognostic scales for intra-abdominal infection are used, which have both advantages and disadvantages [3, p. 269].

The aim of our study was to analyse the prognostic significance of the scale of physiological and operational assessment of the risk of complications and mortality (POSSUM) in the treatment of patients with diffuse peritonitis.

**Materials and methods.** The work is based on the analysis of the results of treatment of 63 patients hospitalized in urgent manner for the period from 2015 to 2017 with acute abdominal pathology complicated by peritonitis. There were 49 men (79%) and 14 women (21%). The average age of men was  $(58.5 \pm 1.5)$  years, women –  $(65.2 \pm 1.6)$  years.

The severity of patients was verified according to the WSES Sepsis Severity Score criteria. Revealed signs: phenomena of immunosuppression – 2 (3.2%) patients, the duration of peritonitis (taking into account preoperative preparation) up to 24 hours – 60 (95.2%), the source of peritonitis is the

colon – 6 (9.5%), the source of peritonitis the large intestine (diverticulum) – 9 (14.3%), the source of peritonitis is the small intestine – 11 (17.5%).

All patients were operated on urgently in accordance with the protocols for the provision of urgent and emergency surgical care. Surgical intervention consisted in the elimination of abdominal pathology (appendectomy, cholecystectomy, resection of the small intestine), nasointestinal intubation, debridement, and drainage of the abdominal cavity.

According to the indicator, the sepsis severity score, patients were divided into three clinical groups: with I degree of severity (<7 points) – 31 (49.2%) patients, II degree of severity (7-11 points) – 22 (34.9%), III degree of severity (> 11 points) – 10 (15.9%).

During hospitalization, the physiological parameters of the POSSUM scale were revealed: age under 60 years – 59 (93.6%) patients; the level of consciousness (clear consciousness) – 61 (96.8%); heart rate in the range of 81-100 per minute – 61 (96.8%); shortness of breath on exertion or chronic obstructive pulmonary disease confirmed by plain chest x-ray – 27 (42.8%); cardiac status (taking antihypertensive drugs) – 52 (82.5%); systolic blood pressure less than 130 mm Hg. – 40 (63.5%); haemoglobin <114 g/l – 29 (46%); leukocytosis > (10-20) \* 10<sup>9</sup>/l – 60 (95.3%); urea in the range of 7.6-10 mmol/l – 32 (50.8%); plasma potassium 3.2-3.4 meq/l – 60 (95.3%); plasma sodium 126-130 meq/l – 62 (98.4%).

Research results. Patients with I degree of severity needed one surgical intervention to eliminate peritonitis. Postoperative complications were detected in 8 (12.8%) patients. The index of physiological assessment on the POSSUM scale was  $19 \pm 1.5$  points, the intraoperative criterion was  $10 \pm 0.9$  points. The expected complication rate according to the POSSUM scale was assumed to be 11.7% ( $p = 0.3181$ ).

Patients with the II degree of severity, the treatment of peritonitis was carried out by the method of laparotomy according to the program or on demand. The index of the physiological assessment on the POSSUM scale increased on average to  $24 \pm 1.9$  points, and the increase in the operational assessment to  $15 \pm 0.99$  points was due to a change in the nature of the effusion, expansion of the volume of surgery. At the same time, the predicted frequency of postoperative complications was 26.7%, the actual – 27.2% ( $p = 0.3231$ ).

Vacuum-assisted laparostomy was used in patients with grade III severity. The physiological indicator was  $34 \pm 2.6$  points, which is due to protein-electrolyte disturbances against the background of dehydration, endogenous intoxication. The expected complication rate according to the POSSUM scale reached 68.4%, while the actual rate was 70% ( $p = 0.3862$ ).

The indicators of the POSSUM scale are reliably comparable with the actual incidence of postoperative complications in patients with diffuse peritonitis, which confirms the high sensitivity of the prognostic scale, and makes it possible to use it to select an individual surgical aid.

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**ПРОГНОЗ ЗВИЧНОГО НЕВИНОШУВАННЯ ВАГІТНОСТІ**

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**Актуальність.** Частота невиношування вагітності стабільно залишається високою та досягає 30 % від кількості бажаних вагітностей. Статистично кожен другий випадок мимовільного переривання вагітності трапляється у I триместрі, а 25% з них припадає на звичне