

*Materials of Conferences***CLINICAL NUTRITION SUPPORT IN LIVER AND KIDNEY'S INSUFFICIENCY AFTER ABDOMINAL SURGICAL OPERATIONS**

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The liver and kidney insufficiency in the early postoperative period are the actual problem because of menacing at mortality and severity in patients with acute surgical pathology. Progressing of hepatorenal complications are the cause of the severe protein-energetic damages that respond poorly to the therapies. Protein-energetic metabolism correction in the treatment of patients with postoperative hepatorenal insufficiency is the most actual problem in contemporary clinical nutrition.

Methods: It was evaluated materials from 1527 patients with acute abdominal surgical pathology: 540 patients with acute pancreatitis, 426 – bowel obstruction, 561 – peritonitis (283 – perforation of gastrointestinal tract, 175 – acute appendicitis, 103 – acute biliar pathology). Acute liver and kidney injury was documented in 449 (29%) patients. Pre- and postoperative dopplerography values were obtained and used to calculate functional liver reserve (FLR), and glomerular filtration rates used to calculate functional kidney reserve (FKR). Nutritional status was estimated by Nottingham questionnaire and blood tests.

Results: Basing on predictions of hepatorenal complication's risk, early biomarkers and qualified hepatorenal insufficiency stages (indemnification,

subcompensated and failure stages) and the protein-energetic deficiency we degreed the preventive treatment and nutrition correction. Revealing of high risk was the indication for preventive treatment. In case of high risk of hepatorenal failure the functional liver and kidney reserves were poor or loss (FLR – $1,4 \pm 0,03$, FKR – $4,3 \pm 0,2\%$). 89,4% patients with high risk and poor functional reserve had liver and renal dysfunction and needed in directed nutrition support. In case of evolved hepatorenal insufficiency the complex of intensive therapy must include: correction of coagulopathy and blood circulation, hepato- and nephroprotection, detoxification (with extracorporeal support) and, undoubtedly, protection of the protein-calorie deficiency by nutrition support (special solutions and drugs). 128 patients needed in the extracorporeal liver and kidney support. All patients with the extracorporeal liver and kidney support were needed in advanced nutrition support (amount of aminoacides per day without extracorporeal support – $0,67 \pm 0,01$ g/kg, in case of extracorporeal support – $1,82 \pm 0,03$ g/kg and accelerated speed of infusion – $0,2$ g/kg per hour). Applying early extracorporeal detoxification is the indication for isochronic support to losses of the protein-calorie metabolism by special parenteral and enteral compounds (nephro- and hepatotropic action) with the maximal admissible dosage of omega-3 fat acids.

Conclusions: The patients with the high risk of liver and kidney insufficiency and poor functional reserves are needed in the special approach for nutrition support.

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