Effect of glutamine combined with early enteral nutrition supply on amino acid metabolism, bacterial translocation and inflammatory reaction of acute severe pancreatitis patients

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To investigate the effects of glutamine combined with early enteral nutrition supply on amino acid metabolism, bacterial translocation and inflammatory reaction of acute severe pancreatitis patients. Methods: A total of 80 cases of acute severe pancreatitis patients were enrolled and divided into two groups according to different nutrition support treatment methods. Observation group received Glutamine combined with early enteral nutrition supply, control group received total parenteral nutrition. Then amino acid metabolism, bacterial translocation and inflammatory reaction were compared. Results: (1) Amino acid metabolism: serum lysine, phenylalanine, methionine, threonine, isoleucine, leucine, valine of observation were higher than those of control group; (2) Intestinal bacterial translocation: Bifidobacterium, Lactobacillus numbers of observation group were higher than those of control group; number of Escherichia coli, Staphylococcus were lower than those of control group; (3) Inflammatory response: serum MCP-1, HMGB-1 content of observation group were lower than those of control group. Conclusion: Glutamine combined with early enteral nutrition therapy is helpful to prevent bacterial translocation, improve amino acids metabolism, relieve inflammation reaction; it's an ideal support treatment method in severe acute pancreatitis.

[KEY WORDS]: Severe acute pancreatitis; Glutamine; amino acid metabolism; Intestinal bacterial translocation; Inflammatory reaction