

# Clinical efficacy of ilaprazole combined with somatostatin on severe acute pancreatitis and the effects on oxidative stress and inflammatory response

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**Abstract:** This study investigates the clinical efficacy of ilaprazole combined with somatostatin on severe acute pancreatitis (SAP) and the effects on oxidative stress and inflammatory response. Seventy SAP patients were randomized to the control and observation groups, which received the somatostatin treatment and ilaprazole combined with somatostatin treatment for seven days, respectively. Results found that, the time of abdominal pain relief, time of serum amylase recovery, time of urinary amylase recovery and time of defecation recovery in the observation group were shorter than those in the control group ( $P<0.05$ ). After the treatment, comparing to the control group, in the observation group the heart rate decreased ( $P<0.05$ ), the mean arterial pressure and the central venous pressure increased ( $P<0.05$ ), the serum levels of super oxide dismutase and glutathione peroxidase increased ( $P<0.05$ ), and the serum levels of malondialdehyde, tumor necrosis factor  $\alpha$ , interleukin-6, C-reactive protein decreased ( $P<0.05$ ). In treatment of SAP, ilaprazole combined with somatostatin can enhance the curative efficacy, and decrease the oxidative stress and the inflammatory response in patients. In addition, it cannot increase the adverse reactions, with good safety.

**Keywords:** ilaprazole; somatostatin, severe acute pancreatitis, oxidative stress, inflammatory response

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