

Comments on the article about the treatment of peripancreatic infection

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Abstract

We read with great interest the article by Tang *et al* published in issue 4 of *World Journal of Gastroenterology* 2010. The results of their study indicate that percutaneous catheter drainage in combination with choledochoscope-guided debridement is a simple, safe and reliable treatment procedure for peripancreatic infections secondary to severe acute pancreatitis. However, there are some points that need to be addressed, including data about the patients in the study and their clinical characteristics, data about infection and superinfection during the treatment and type of treatment of patients with acute necrotizing pancreatitis.

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Key words: Acute pancreatitis; Pancreatic necrosis; Infection; Non-surgical management

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TO THE EDITOR

We read with great interest the article by Tang *et al*^[1] published in issue 4 of *World Journal of Gastroenterology* 2010. The article provides important data because it evaluated the new method used in treatment of pancreatic and peripancreatic infections secondary to severe acute pancreatitis (SAP). The results of their study indicate that percutaneous catheter drainage in combination with choledochoscope-guided debridement is a simple, safe and reliable treatment for peripancreatic infections secondary to SAP. The authors suggested that the procedure performed in their study could be used as an alternative to the conventional open-abdominal surgical or laparoscopic debridement in treatment of peripancreatic infection of early SAP patients.

However, there are some points that need to be addressed. In the section of RESULTS, the authors specified “the time from the onset of pancreatitis to drainage was 4-11 d (mean 5.3 d). Before the sinus tract was expanded, the external drainage was maintained for 3-5 d (mean 3.6 d)”. Hence, practically all interventions were performed during the first two weeks from the onset of pancreatitis. However, it is known that SAP runs a biphasic course^[2]. During the first 1-2 wk, there is a pro-inflammatory response, resulting in a systemic inflammatory response syndrome. It is a sterile response in which sepsis or infection hardly ever occurs. However, after the first 1-2 wk, there is a transition from a pro-inflammatory to an anti-inflammatory response. It is during this anti-inflammatory response that the patient is at risk for the translocation of intestinal flora and the development of infection of necrotic tissue and fluid collections. It is quite uncommon that all patients in the study had pancreatic infection in the first two weeks of the disease. In the article, there are no data confirming that peripancreatic necroses and collections were infected. Also, it is well known that continuous percutaneous drainage often leads to colonization of the cavity with microorganisms and results in frequent superinfection^[3,4]. However the authors did not report any data about it.

The authors had impressive results comparing to other similar studies^[3-5], but it is disputable if comparable patients were treated in this study since the authors did not present data about the clinical scoring and multiple organ failure of the included patients.

Finally, on the basis of our long-term experience, we believe that the disease catheter drainage of infected necrotic tissue is very poor in the beginning, irrespective of the catheter size we used. However, during the course of SAP, a transition from solid necrotic tissue to more liquid contents leads to a higher success rate of the evacuation of necrotic tissue from the cavities, regardless of the catheter size. Therefore, we consider that only conservative treatment with proper intravenous hydration and administration of proper antibiotics should be performed in beginning of the disease. Percutaneous drainage with vigorous irrigation should be considered when truly conservative treatment fails to resolve infected pancreatic necrosis. We consider that necrosectomy, including choledochoscope-guided debridement, may represent an overtreatment in beginning of the disease in these patients with usually poor general condition. However, it is difficult to discriminate between necrotic tissue and normal tissue, and a very high

risk of bleeding from vessels may occur in necrotized tissue during or immediately after the intervention.

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