

Current status of the diagnosis and treatment of acute severe pancreatitis

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Abstract

Acute severe pancreatitis (ASP) was habitually called acute hemorrhagic necrotizing pancreatitis. But according to the pathological findings of our 139 surgical cases, 59.7% belonged to necrotizing type, while hemorrhagic necrotizing type only accounted for 23.0%. Involvement of pancreas is not necessarily diffuse, 3.7% only affected pancreatic tail. The incidence of the disease is highest in 41-60 year age group. Early recognition of severe type of the disease is always an emphasis in clinical studies. CT scanning is the main diagnostic tool used. Clinical diagnostic criteria offer some help in clinical practice. Banks' criteria is more commonly used in western countries instead of Ranson criteria in the past. For clinical evaluation of the progress of the disease, APACHEII scoring method is commonly used. Classification of CT findings is helpful in judging the severity of the disease. Once the diagnosis was definitely established, should it be treated surgically or managed by medical way? The pendulum had swung for many years. Our current consensus is "combined treatment system". That is: patients with uninfected pancreatic necrosis should receive non-surgical treatment. The success rate is over 85%. Cases of infected necrosis went downhill, vigorous treatment should be given immediately.

Otherwise, late stage operation should by all means be considered and wait for localization of the infection with the hope of complete cure after single drainage operation. "Obstructive biliary pancreatitis" and "Ruptured pancreatic abscess causing peritonitis" are indicated for immediate operation. Cure rate by non surgical treatment is significantly increased, with a success rate of operative treatment of 80%. Medical treatment is administered by the combined traditional Chinese and Western medicine. Besides all the necessary supportive and symptomatic treatment, three major aspects of treatment should

be specially emphasized: (1) pancreatic infection. According to the bacterial spectrum, concentration of antibiotics in the pancreas and drug sensitivity test, we advocate the use of quinolone class antibacterial agents such as imipenem, Ofloxacin, ciprofloxacin, *etc* as drug of first choice. (2) Inhibition of pancreatic secretion using Gabexate mesilate or synthetic analogue of somatostatin. The two analogues that are widely used in China are Octreotide (Sandostatin) introduced to China earlier; and the 14-peptide somatostatin (Stilamin) introduced later but also has been used for some years. There were reports about the benefits and drawbacks of the two and sometimes quite controversial. According to our experience in using these two analogues, we have not met with serious side effects of Octreotide as reported in the western literatures. The action of Stilamin on sphincter of Oddi is causation of relaxation, but the action of Octreotide on it was quite controversial. Some reported about its spasmodic action on the sphincter. We have studied in dog experimentation and proved that Sandostatin can significantly lower the basal pressure of sphincter of Oddi. Our consensus of their use in ASP is that either can be used as available, except in most severe cases, we prefer Stilamin. However, Sandostatin has some merits in the following conditions: It can be given hypodermically or intramuscularly. It is more suitable for outpatients with milder disease. Chronic pancreatitis with acute flare up. (3) Treatment with traditional Chinese medicine: according to the Chinese theory of the pathogenesis -"wetness and heat stagnated at middle focus", the principle of treatment is "relieving liver, adjusting gas, clearing heat, drying wetness, getting through and driving down". We have made a prescription consisting of several important ingredients, in the form of decoction. Since the 1980s, we have studied a few Chinese herbal medicines separately. They were all proved to have promising effect. In conclusion, in ASP, we advocate combination of Western and traditional Chinese medical treatment.

Key words: Pancreatitis/diagnosis; Pancreatitis/therapy; Tomography, X-Ray computed; Surgery, operative; Antibiotics; Somatostatin

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