

EARLY DIAGNOSTICS OF INFECTED PANCREONEKROSIS

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Abstract: Moreover, in women this disease occurs 3-5 times more often. At the same time, according to the same organization, “more than 1 million people in the world are affected by echinococcosis, and among various organs and tissues, in 44-84% of cases the process is localized in the liver.” Large centrally located cysts and massive cystic lesions can lead to compression of the vascular-secretory elements of the liver with the development of symptoms of obstructive jaundice and portal hypertension. There is no consensus on the origin of non-parasitic liver cysts. Some authors are of the opinion that cysts form as a result of inflammatory hyperplasia of the biliary tract during embryogenesis and their subsequent obstruction.

Keywords: hepatocytes, zoonotic foci, echinococcus, liver.

РАННЯЯ ДИАГНОСТИКА ИНФИЦИРОВАННОГО ПАНКРЕОНЕКРОЗА

Аннотация: При этом у женщин данное заболевание встречается в 3-5 раз чаще. В то же время, по данным той же организации, «более 1 миллиона человек в мире поражены эхинококкозом, причем среди различных органов и тканей в 44-84% случаев процесс локализуется в печени». Крупные центрально расположенные кисты и массивные кистозные поражения могут привести к сдавлению сосудисто-секреторных элементов печени с развитием симптомов механической желтухи и портальной гипертензии. Единого мнения о происхождении непаразитарных кист печени нет. Некоторые авторы придерживаются мнения, что кисты образуются в результате воспалительной гиперплазии желчевыводящих путей в период эмбриогенеза и последующей их обструкции.

Ключевые слова: гепатоциты, зоонозные очаги, эхинококк, печень.

INTRDUCTION

Infected pancreatic necrosis is a serious problem in modern urgent surgery. Purulent complications of acute pancreatitis are observed in no more than 5% of patients, but are accompanied by a mortality rate of 50-60%.

MATERIAL AND METHODS

During the period 2017 to June 2020, 458 patients with acute pancreatitis were treated at the clinic. Pancreatic necrosis was diagnosed in 30 people (6.6%). Out of 30 patients with pancreatic necrosis, death was observed in 6 patients (20%). Of these, only 1 person died of pancreatogenic shock in the enzymatic phase of the disease. In other cases, death occurred as a result of purulent intoxication in the phase of septic sequestration. In total, purulent complications were observed in 24 patients. Mortality in case of purulent complications of pancreatic necrosis was 20.8%. In 6 people, septic sequestration was accompanied by destruction of the colon, in 4 of them with arrosive bleeding. An unfavorable combination of sepsis, destruction of the colon, arrosive about bleeding and alimentarywasting was accompanied by a mortality rate of 99%. For the timely diagnosis of purulent complications of acute pancreatitis, along with laboratory tests, dynamic ultrasound examination and magnetic resonance imaging, precision endoscopic thermometry was used with the Greisinger GMH 3700 device (Germany). For this purpose, the

sensor of the device was introduced through the biopsy channel of the gastroscope. Thermometry was performed when the measuring head of the sensor was in contact with the posterior wall of the stomach. Measurement time 30 seconds. The presence of local hyperthermia was considered justified when the difference with axillary temperature was more than 0.5 degrees.

RESULTS

Despite the success of the treatment of the enzymatic phase of acute pancreatitis, it cannot be completely prevented its further course with the development of the phaseseptic sequestration. The most important factor determining the prognosis of the course of the disease is the timely diagnosis of purulent complications with possibly early and radical surgical treatment. The addition of destruction of the colon or duodenum, erosive bleeding, alimentary exhaustion makes the surgical situation unmanageable. In 6 patients, the operation was performed with a delay with severe complications, which was accompanied by a mortality rate of 99%. Etc and this mistakes aside Overdiagnosis of purulent-necrotic pancreatitis was not allowed in any patient. All this testifies to the insufficient persistence of surgeons in determining the indications for surgical treatment of purulent complications of pancreatic necrosis. In 18 patients with infected pancreatic necrosis, the development of purulent complications was observed within 1421 days from the onset of the disease. In 6 patients, purulent complications were recorded earlier. Ultrasound examination did not allow to recognize purulent complications of pancreatic necrosis in any case. Magnetic resonance imaging did not make it possible to fully diagnose retroperitoneal phlegmon in 8 out of 24 patients, although its indirect signs were established during retrospective image analysis. Endoscopic thermometry showed isolated hyperthermia of the posterior gastric wall in 22 of 24 patients. It should also be noted that local hyperthermia was registered in 890 out of 30 patients without purulent complications. Consequently, the sensitivity of endoscopic precision thermometry for the diagnosis of its purulent complications was 91.6%; specificity - 73.3%.

Findings. Despite the severity of the clinical course of infected pancreatic necrosis, timely diagnosis of purulent complications with immediate operation can optimize treatment results. Along with ultrasound and magnetic resonance imaging, endoscopic precision thermometry of the posterior wall of the stomach can be used to diagnose abscesses in pancreatic necrosis. A delay in surgical treatment with the appearance of destruction of the colon, erosive bleeding, sepsis significantly worsens the results of treatment.

CONCLUSION

Early diagnosis of infected pancreonecrosis is pivotal for guiding timely and effective management strategies, thereby improving patient outcomes and reducing morbidity and mortality. Recognizing clinical signs such as persistent fever, worsening abdominal pain, and signs of systemic inflammation is essential in suspecting this complication. Diagnostic imaging modalities, including contrast-enhanced CT scans and MRI, play a crucial role in confirming the diagnosis and assessing the extent of necrosis and associated complications. Furthermore, the utilization of minimally invasive techniques such as fine-needle aspiration for culture and sensitivity testing can aid in identifying causative organisms, guiding antibiotic therapy, and informing decisions regarding intervention, such as percutaneous drainage or endoscopic necrosectomy.

A multidisciplinary approach involving gastroenterologists, interventional radiologists, surgeons, and infectious disease specialists is imperative for optimal management. Early initiation of broad-spectrum antibiotics, along with aggressive fluid resuscitation, supportive care, and close monitoring for signs of systemic complications, is paramount. Additionally, timely intervention

with minimally invasive or surgical techniques aimed at source control and necrotic tissue debridement can mitigate the risk of sepsis and multiorgan failure. Long-term management strategies should focus on preventing recurrent infections and optimizing pancreatic function through nutritional support and pancreatic enzyme replacement therapy.

In conclusion, a proactive approach to early diagnosis, prompt intervention, and comprehensive multidisciplinary care is essential in achieving favorable outcomes in patients with infected pancreonecrosis. By addressing the infection promptly and effectively, clinicians can mitigate the associated risks and improve the overall prognosis for affected individuals

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