

Clinical Characteristics of Pancreatic Cancer Patients with Acute Pancreatitis

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Abstract: Objective: To explore the clinical characteristics of pancreatic cancer patients with acute pancreatitis. Method: 50 patients who received treatment in our hospital from March 2018 to March 2023 were selected as experimental subjects. Among them, the clinical data of 50 patients with pancreatic cancer who suffered from acute pancreatitis were taken as the experimental group, followed by simple pancreatic cancer patients and patients with acute pancreatitis in the same period as the control group and reference group (patients with pancreatic cancer as the control group and patients with acute pancreatitis as the reference group). First, collect the general clinical data of patients at admission, collect and sort out the serological and imaging characteristics of serum Amylase, conjugated bilirubin, CA199, CEA, abdominal B-ultrasound, abdominal enhanced CT, endoscopic retrograde cholangiopancreatography (ERCP) and other examinations. Results: The serum and Amylase levels in the experimental group were significantly higher than those in the control group ($P < 0.01$), while the serum Amylase levels in the reference group were higher than those in the experimental group ($P < 0.05$); The CA199, CEA, and conjugated bilirubin levels in the experimental group were significantly higher than those in the reference group ($P < 0.05$). In terms of imaging examination, there was no statistically significant difference in the characteristics of pancreatic duct dilation and intrahepatic and extrahepatic bile duct dilation between the experimental group and the simple control group ($P > 0.05$), while the differences between the experimental group and the reference group were statistically significant ($P < 0.01$). Conclusion: The examination data of pancreatic cancer patients with acute pancreatitis, that is, the experimental group patients, showed clinical symptoms repeatedly. Serum Amylase, CA199 and conjugated bilirubin were easily increased in serological examination, and pancreatic duct dilatation and extrahepatic and extrahepatic bile duct dilatation were easily seen in imaging examination.

Keywords: Pancreatic Cancer; Acute Pancreatitis; Clinical Characteristics; Serological Examination

Introduction

Pancreatic cancer, which starts with acute pancreatitis, accounts for 5.7% of the total incidence rate of pancreatic cancer. There is more fusion between the symptoms of acute pancreatitis and pancreatic cancer, so failure to make careful analysis and judgment will lead to misdiagnosis of pancreatic cancer and missed treatment opportunity of pancreatic cancer. Pancreatic cancer is one of the diseases with the highest Case fatality rate rate. If the treatment opportunity is missed, the patients will eventually affect the treatment effect. In order to better distinguish the pathological phenomena of acute pancreatitis and pancreatic cancer, this study reviewed and analyzed 50 patients who came to our hospital for treatment. Patients with acute pancreatitis as the cause of pancreatic cancer, understood the clinical characteristics of patients, so as to improve the probability of targeting patients and ensure that patients can get better treatment.

1. Materials and Methods

1.1 Selection

General data: The data of 50 patients who received treatment in our hospital from March 2018 to March 2023 were selected as the experimental subjects. As the experimental group, the patients in the experimental group were all pancreatic

cancer caused by acute pancreatitis. The clinical data, serum indicators and image data of patients were used as reference data for future disease analysis. At the same time, patients in the reference group were selected. The reference group was not a patient with pancreatic cancer caused by acute pancreatitis. Finally, the control group was designed again. The patients in the control group were acute pancreatitis patients, not pancreatic cancer patients, and prepared for later comparison by collecting tripartite data.

Inclusion criteria for the experimental group:

Firstly, the inclusion criteria for patients in the experimental group. First, the patient should be confirmed as a pancreatic cancer patient with acute pancreatitis as the first symptom through pathological biopsy. Second, after pancreatic cancer was confirmed by biopsy, the patient was caused by acute pancreatitis. The clinical manifestation of the patient was mostly upper abdominal pain, and the serum, lipase, etc. would increase. Third, select the patients in the reference group and the control group according to the relevant standards, and determine that the patients are pancreatic cancer patients, but not caused by acute pancreatic cancer. The patient's internal organs such as the heart, lungs, and liver have no other major diseases, and there is no history of other malignant tumors.

Exclusion criteria of the experimental group: patients with pancreatic cancer but not pancreatic cancer caused by acute pancreatitis are not patients with acute pancreatitis.

In the final experimental group, there were 23 males and 27 females, aged 41-87 years, with an average age of (67.33 ± 12.28) years. Among the 50 patients, 44 patients developed abdominal distension and pain, of which 11 patients not only had abdominal distension and pain, but also had yellow staining of the sclera on their skin. Six patients developed yellow staining of the skin and sclera, without any abdominal distension or pain. There were 23 patients with elevated carbohydrate antigen 199 and normal Carcinoembryonic antigen. Carcinoembryonic antigen increased and carbohydrate antigen 199 was normal in 9 patients. Carcinoembryonic antigen and carbohydrate antigen increased simultaneously in 8 patients. 38 patients in the experimental group received surgery, and each patient was confirmed as a pancreatic cancer patient by endoscopic ultrasound biopsy or cancer cell metastasis biopsy. There were 28 males and 22 females in the control group. The age was 39-90 years old, with an average of (67.29 ± 10.67) years old. All patients were treated surgically and diagnosed as pancreatic cancer according to their pathology; There were 28 males and 22 females in the reference group, with an average age of (57.95 ± 16.89) years. All patients met the diagnostic criteria for acute pancreatitis.

1.2 Method

1.2.1 Detection of serum blood indicators

During the admission period for treatment, the patient needs to undergo a venous blood test. The specific time is on the second day of the patient's admission, and venous blood needs to be drawn under fasting conditions. Fasting venous blood sampling is mainly used to detect whether the carbohydrate antigen 199 and Carcinoembryonic antigen of patients are increased.

1.2.2 Detection of imaging indicators

The patient needs to undergo ultrasound imaging examination, which also requires an empty stomach. The patient applies medication to the abdomen and uses an ultrasound probe to scan the abdomen to obtain a clear picture of the patient's internal organs. When performing abdominal CT scanning, contrast agent should be injected intravenously to obtain images through CT scanning. When performing endoscopic retrograde cholangiopancreatography for acute pancreatitis, the patient is first subjected to general anesthesia, and a duodenoscope is inserted from the mouth to the opening of the duodenal nipple. A guide wire and tool are inserted to complete the imaging of the hepatobiliary system and pancreas, and surgical treatment is also completed.

2. Results

2.1 Statistical analysis results of serum blood indicators

Serum Amylase in the experimental group was significantly higher than that in the control group ($P < 0.01$), and there was no significant difference in other test indexes ($P > 0.05$). CA199, conjugated bilirubin and CEA in the experimental group were significantly higher than those in the reference group ($P < 0.05$), and Amylase in the experimental group was significantly lower than that in the reference group ($P < 0.01$).

2.2 Experimental group and simple imaging feature statistics

The analysis results showed that there was no statistically significant difference between the control group in terms of pancreatic duct dilation, intrahepatic and extrahepatic bile duct dilation, and bile duct truncation sign ($P > 0.05$). The experimental group and the reference group showed statistically significant differences in pancreatic duct dilation and intrahepatic and extrahepatic bile duct dilation ($P < 0.05$), but there was no statistically significant difference in bile duct truncation sign ($P = 0.076$) ($P > 0.05$).

3. Discussion

According to the data released by China Cancer Center, in 2022, the incidence rate of pancreatic cancer will be the 10th in male malignant tumors and the 8th in female malignant tumors. About 62210 patients will be newly diagnosed with pancreatic cancer, including 32970 men and 29240 women. There are 49830 deaths of pancreatic cancer every year, 25970 males and 23860 females. The mortality rate ranks fourth among all malignant tumors. This study analyzed the clinical data of 50 patients with pancreatic cancer who received treatment in our hospital in the past five years, cooperated with the clinical data of patients with single acute pancreatitis and pancreatic cancer as a comparison, collected a large number of patients' clinical symptoms, mastered the clinical manifestations, improved the efficiency of disease judgment, and further ensured the accuracy of disease inspection. By improving the accuracy of the examination results, the missed diagnosis of pancreatic cancer patients can be prevented. For patients, the goal of detecting and treating diseases as soon as possible can improve their survival rate. For patients with pancreatic cancer, because of the particularity of pancreatic cancer caused by acute pancreatitis, in clinical practice, if patients with acute pancreatic cancer, their clinical manifestations and characteristics will mask the symptoms of early pancreatic cancer. If they can not be found and treated in time, pancreatic cancer will eventually be misdiagnosed or missed.

The object of this study is to analyze the clinical symptoms and imaging data of pancreatic cancer patients with acute pancreatitis, and compare the clinical data of different types of patients to make a systematic analysis. The results showed that the Amylase in the experimental group was significantly higher than that in the control group. Some clinical symptoms of patients with simple pancreatitis can be reflected in pancreatic cancer caused by acute pancreatitis. For the patients in the experimental group, their clinical symptoms are more similar to those of pancreatic cancer, and they will be misdiagnosed when they are examined, thus delaying further treatment of patients.

4. Summary

Pancreatic cancer, which starts with acute pancreatitis, is relatively rare in clinical practice. However, mastering its clinical manifestations, laboratory indicators and imaging characteristics can help us identify pancreatic cancer earlier, increase the treatment opportunities of patients and improve the survival rate of patients.

References

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