

EVOLUTION AND COMPLICATIONS IN ACUTE PANCREATITIS

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Abstract

The evolution of a pancreatitis can lead to healing, to chronically manifestation, to the development of some evolutional complications or to the appearance of the recurrent. The complications in acute pancreatitis, in the severe forms are caused by the accumulation in the peripancreatitis and in the omental bursa of some collections of fluids, composed mainly from sterile pancreatic detritus.

Key words: evolution, complication, pancreatic abscess, hyperglycemia.

INTRODUCTION

Even in the case of a well-conducted treatment it is possible that a deterioration of the clinical picture could appear and complications could appear also, the passing to a more aggravated form being possible anytime in an acute pancreatitis.

One further factor of gravity in the evolution can be represented by one of the following aspects: the first attack of acute pancreatitis, especially on the basis of alcohol consumption, preexistent cardiac pulmonary affections, palpation of an abdominal mass or collecting the hemorrhagic ascitic or colourless fluid.

From the biologic point of view, it is considered that there is no parallelism between the gravity of the pancreatitis and the serical or urinary value of the amylases, but the increasing of LDH, hyperglycemia and the hyperleukocytosis shows a severe potential to evolution.

The screening of the patient with acute pancreatitis is related to the general condition, the tension value and the pulse, the diuresis and the respiratory functions.

A good general condition and values to be normalized in the biologic picture shows the efficiency of the therapy, and the repeated echographic exploration assures an early diagnosis in the case of an evolutional complication that appeared after the period of apparent amelioration.

The evolution of a pancreatitis can lead to healing, to chronically manifestation, to the development of some evolutional complications or to the appearance of the recurrent.

The complications in acute pancreatitis, in the severe forms are caused by the accumulation in the peripancreatitis and in the omental bursa of some collections of fluids, composed mainly from sterile pancreatic detritus. The evolution of some collections can be to resorption or to the formation of an abscess or a pancreatic pseudocyst, if their over infection takes place or not.

Other complications that may appear are: ascitic pancreatic fistula, pancreatic phlegmon or the mechanical icterus.

From the microbiologic point of view the cultures collected appear with variable percentage of 66% as poli microbial, the most frequent isolated being E. Coli, negative gram baciles and rarely the Staphylococcus aureus.

The pancreatic abscess leads to complications usually severe, the clinical signs marked by sepsis, severe respiratory disorders, the deterioration of the values of glycaemia and the increasing of the amylase in the blood to values of over 600 units per litre being considered as factors of prognosis for gravity in the evolution of an acute pancreatitis with abscess formation.

The abscess being created has as factors of gravity prognosis the sepsis, the abdominal distension, bacteraemia and the severe respiratory disfunction.

The complications of the pancreatic abscess are represented by:

- severe bleeding, by the erosion of the splenic vena, the left gastric artery, the upper mesenteric artery or of another near important channel;
- the perforation in the fiber peritoneum, with a very severe peritonitis, usually deadly;
- the opening of the abscess at the level of the cavitary organs near it as it is the stomach, duodenum, the biliary colon or branch; rarely could be found erosions at the level of the mediastinum, pleura or bronchitis;
- the pulmonary complications are represented by the pleural empiem, pneumonia, acute respiratory insufficiency or even ARDS, the last one leading to mortality in 50% of the cases when it needs respiratory proteases;
- upper digestive hemorrhages, as a consequence of the esophagitis, gastritis or duodenitis inducted by the pancreatic infectious process;
- pileflebitis, hyperglycemia, nefropatia, bacterial endocarditis, titanic attacks, as a consequence of the severe hypocalcemia and are refractory to treatment.

THE PURPOSE OF THE PAPER.

The purpose of this paper is to evaluate from the point of view of the evolution and complications that could appear in the acute pancreatitis.

MATERIALS AND METHOD

For this paper we made a study with a group of 50 patients from the total of 269 of patients from the Surgery section of Clinical County Hospital from Oradea in the period of 2005-2009.

RESULTS AND DISCUSSIONS

The source of data has been represented by the publications of the analyses of the activity from the surgical sector and those from the archive of the County Service.

The results of the research are being interpreted statistically and mathematically, discussed in the light of the data from the literature, allowing me to elaborate conclusions.

The major visceral dysfunctions present in the beginning or which appeared in the evolution represent a major criteria for the gravity and not favorable prognosis. To observe the visceral insufficiencies we used the Tran and Costa criteria. The most frequent visceral dysfunctions were the cardiac circulatory insufficiency present at 16 patients from the group of 50, acute kidney failure present at 6 cases, hepatitis insufficiency observed at 8 patients and hematologic present in 9 cases.

Visceral insufficiency

Table 1

No. of cases	Respiratory	Cardiac vascular	Kidney	Hepatic	Hematologic	Digestive	Neurological
50	5	16	6	8	9	4	2
%	10	32	12	16	18	8	4

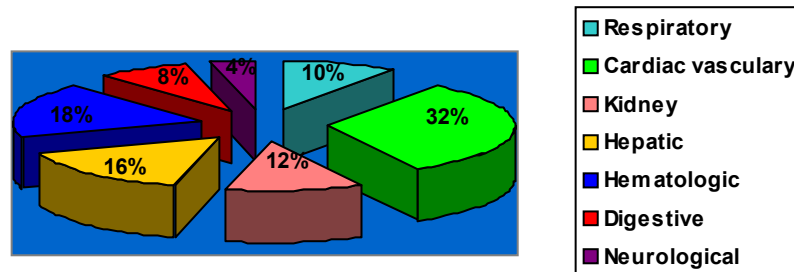


Fig. 1. The distribution of the no. of cases with visceral dysfunction.

Index of severity CT(CTSI)

Table 2

	Mortality	Complications
0-3	3%	8%
4-6	6%	35%
7-10	17%	92%

CONCLUSIONS.

1. The evolution of a pancreatitis can lead to healing, to chronically manifestation, to the development of some evolutional complications or to the appearance of the recurrent.
2. The complications in acute pancreatitis, in the severe forms are caused by the accumulation in the peripancreatitis and in the omental bursa of some collections of fluids, composed mainly from sterile pancreatic detritus.
3. The pancreatic abscess leads to complications usually severe, the clinical signs marked by sepsis, severe respiratory disorders, the deterioration of the values of glycaemia and the increasing of the amylase in the blood being considered as factors of prognosis for gravity in the evolution of an acute pancreatitis with abscess formation.
4. The major visceral dysfunctions present in the beginning or which appeared in the evolution represent a major criteria for the gravity and not favorable prognosis.

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