ON THE DIAGNOSIS AND TREATMENT OF ACUTE PANCREATITIS

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In urgent abdominal surgery the acute inflammation of the pancreas always creates difficulties in the differential diagnosis of the disorder. Treatment and prophylaxis which to a large extent depend on correct and prompt diagnosis recently also represent problems of interest. The superior results from the conservative treatment impose to the surgeon higher precision in making the diagnosis of this ailment.

During the past two years (1962—1963) in the Surgical Clinic we had a number of cases of acute pancreatitis. For this period two of the 15 patients with this diagnosis were admitted with the diagnosis of cholelithiatic attack, two — with acute cholecystitis, two — with nephrolithiasis and nine — with acute pancreatitis.

In all patients the diagnosis is elucidated within the first 24 hours, and in 6 — even in the out-patient service. Diagnostic errors, in the sense of hyperdiagnosis, are admitted in two patients (one suffering from acute gastritis and the other with hernia inguinalis incarcerata).

Twelve of the patients with a final diagnosis of acute pancreatitis are females and one — a male. Four of the patients are below 40 years of age and 9 — from 40 to 60 years. In the first 24 hours from the onset of the disorder 8 patients were admitted to hospital, within a period of 3 days — 3 patients and after the third day — two patients. In three of the patients pancreatitis was related to preliminary or accompanying disorders of the bile ducts. Two of the patients have suffered in the past from pancreatic disorders (one of them is operated on for a tumor and the other is treated three months ago for acute pancreatitis).

The anamnestic data for disorders of the bile ducts and the pancreas, the habitus of the patient, the nontypical clinical picture, severe abdominal pains and increased urinary diasthase are basic signs and symptoms for the diagnosis of acute pancreatitis.

As was already mentioned, in 5 patients the diagnosis was rendered easy because they have suffered in the past from disorders of the bile ducts and the pancreas.

Pain, which many authors describe as typical, was not marked and characteristic in our patients. Pains were localized as follows: in the epigastrium — in 6 patients, in the epigastrium and the right hypochondrium — in 3; over the entire abdomen — in two; only in the right hypochondrium — in two patients.

The analysis of the character of the pain made us think of acute pancreatitis when the pain was not typical of any other disorder related to the group of diseases, manifested by "acute abdomen".

In severe general condition and pains in the right hypochondrium cholecystopancreatitis was admitted when insufficient data existed for acute inflammation of the bile ducts. The dynamic follow up of such patients and the presence of biliary pigments in the urine confirmed these suppositions in three of the cases.

Intractible vomiting was not observed in our patients. The habitus of the patients was an important sign for the diagnosis — all patients suffered from marked obesity. Pulsations of the abdominal aorta were lacking in 5 of the patients.

According to most of the authors (Fundiler, Voskresenski, Skook etc.) increased diasthase in the urine is pathognomonic for the acute inflammation of the pancreas. In making the diagnosis of acute pancreatitis we have always paid considerable attention to diasthasuria, although it may be observed in other disorders, such as: appendicitis (2%), cholecystitis, pneumonia, extrauterine pregnancy, some infectious diseases (F. Yu. Pisarenko). Most of our patients have high values of urinary diasthase:

from 256 VE to 1024 VE — in 5 patients
from 1024 VE to 2048 VE — in 2 patients
from 2048 VE to 32384 VE — in 7 patients

We were impressed by the fact that diasthasuria changes sharply for a short period of time in most of the patients and seldom runs parallel to the severity of the disorder. Such is the following case:

V. A., aged 36 years, case history 956/March 8, 1963. Complains of severe pains in the upper half of the abdomen, which have started about 10 hours ago. Vomited several times. Palpatory pains between the umbilicus and the epigastric angle. General condition — moderately affected. Leucocytes — 11,300; diasthase — 2048 VE. Treatment was started with antibiotics, spasmolythic drugs, analgetics, hydrocortisone and trasilol. On the third day, the general condition of the patient improved, the pains decreased but the diasthase increased to 32,384 VE. On the following day the patient continued to improve and the diasthase sharply decreased to normal — 64 VE.

In such cases one has to bear in mind that the degree of diasthasuria depends on the degree of the disorder, the localization of the process, the virulence of the infection and primarily — the reactivity of the organism.

According to some authors (Kait, Zollinger, Cleary) a more precise diagnosis is achieved by adbominal pucture and searching for diasthase in an eventually existing exudate. The proposal of V. M. Lashtefker, who recommends the puncture of the dorsal vaginal fornix in obscure cases and searching for exudate containing diasthase, seems to us more rational.

We did not use these manipulations in making the diagnosis of our cases.

Stress being laid on the great diagnostic value of increased urinary diasthase, we assume that this test is of utmost importance in cases displaying a nontypical clinical picture of acute abdomen. This was observed in most of our patients. The following case is illustrative.

Case history No. 475/February 5th, 1963. Since 24 hours sharp inconstant pains over the entire abdomen. No vomiting. No defecation since two days and no flatulence since the onset of the disease. Similar complaints but with milder pains the patient

has had on several occasions for the last two years. Objectively — the temperature is moderately raised. The abdomen participates in breathing, the abdominal walls are distended with palpatory tenderness in the epigastrium and milder pains in the right hypochondrium. Leucocytes — 10,900, diasthase — over 1024 and on repeated examination after 12 hours — 8192.

In our patients high leucocyte counts are not observed. A rise in the blood sugar level is recorded in only three patients with a severe clinical course of the disease.

According to the mode of treatment our patients may be divided into three groups: the first group comprises patients subjected to conservative treatment with antibiotics, analgetics, intravenous infusions, paravertebral blockades — 4 patients; the second group treated also conservatively, but with the addition of trasilol. In the third group the patients are treated surgically. Of the first group only one case ran a severe course with increased diasthase and pains which continued for 10 days. Improvement occurred gradually. Another two patients were with a milder course of their illness and a gradual improvement after the third day. In the fourth patient the disorder ran a milder course.

The patients belonging to the second group (6) were given daily doses of 15,000—30,000 U of trasilol by intravenous or long term infusion. In 5 of them a considerable improvement resulted in the first 24 hours after the administration of trasilol and only in one — on the 3rd day. The increased diasthase dropped sharply and the pains decreased. The general condition rapidly improved.

The first patient from the group of those surgically treated is urgently operated on, owing to diffioulties in the differential diagnosis between cholecystitis, ileus and pancreatitis. The intraoperative diagnosis was: necrosis of the pancreas. A drainage was made through bursa omentalis by dissection of the gland's capsule. The second patient was operated on after subsidence of an attack of cholelithiasis in the presence of high diasthasuria. Small concrements and mild inflammation of the gall bladder were detected on operation. The pancreas had no macroscopic changes. Cholecystectomia was performed without any drainage of the bile ducts. It was clear, that the inflammation of the pancreas although slightly manifested, is directly associated with the disorder in the bile ducts. At the same time the operation in this patient had a prophylactic significance with regard to a future recurrent pancreatitis.

The third patient was operated on with the final diagnosis of acute pancreatitis. The operation was undertaken on account of a sudden deterioration of the condition of the patient on the eighth day after an initial improvement. This case illustrates the necessity of a dynamic follow up of patients suffering from acute pancreatitis and subjected to conservative treatment.

J. M., aged 57 years, case history No. 846/March 1st, 1963. Severe pains with a several days duration in the epigastrium and the right hypochondrium. Vomited. Distended abdominal walls with severe tenderness in the epigastrium and the right hypochondrium. Leucocytes — 12,200, diasthase 11,920 VE. In the following 6 days under conservative treatment the condition of the patient improved, leucocytosis diminished, diasthase normalized up to 64 VE. On the eighth day severe pains and vomiting reappeared. Diasthase 8192, leucocytes — 10,500, blood sugar — 165 mg%. Conclusion was made that acute necrosis of the pancreas is present and the patient was urgently

operated on. The diagnosis was confirmed on operation. Drainage of bursa omentalis after dissection of the gland's capsule was performed.

In all patients (operated on and not operated) the disorder resulted in complete recovery on the seventh to the thirtieth day for the individual cases.

Conclusions

1. In all cases of acute abdomen with untypical pain examination for diasthase in the urine seems rational for the diagnosis of acute pancreatitis.
2. Increase of urinary diasthase not always corresponds to the severity of the disorder, but always is of great diagnostic value.
3. Patients treated with trazilol are affected more rapidly than those untreated with this drug.
4. Patients suffering from acute pancreatitis subjected to conservative treatment need a dynamic follow-up.

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К ДИАГНОЗУ И ЛЕЧЕНИЮ ОСТРЫХ ПАНКРЕАТИТОВ

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РЕЗЮМЕ

Авторы рассматривают клинический материал 13 больных с острым панкреатитом, леченных в клинике в 1962/1963 г. Диагноз ставился в течение первых суток после поступления в клинику, причем опорными пунктами являлись: сильные боли в животе с нетипичной клинической картиной острого живота, повышенное количество диастазы в моче.

Больные разделены на три группы, в зависимости от способа лечения (леченные консервативно тразилолом, без такового, и оперативно). Подчеркивается преимущество консервативного лечения тразилолом. К операции прибегали при сомнении что начался некроз поджелудочной железы, или при сомнительном диагнозе (1 случай). Подчеркивается необходимость в динамическом прослеживании больных оставленных на консервативном лечении.