Total Pancreatectomy in the Treatment of Acute Necrotising and Hemorrhagic Pancreatitis

Indications-Technique

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Summary. The place of total pancreatectomy in the treatment of pancreatitis is still not clear: the author is in favour of this operation and gives the indications, surgical technique, complications and results. The operation is indicated in cases of necrosis involving more than \( \frac{2}{3} \)rds of the gland, or the whole of the head and part of the body of the pancreas. The duodenum and pancreas should be removed in one piece and intestinal continuity should be restored performing choledocho-jejunal and gastro-jejunal anastomoses.

It is important to carry out this operation early, between the 3rd and 6th days, treating all areas of necrosis before the lesions become the site of uncontrollable infection.

Seven patients out of 9 are still alive, on the 25th of July 1975; they all have easily controlled diabetes, a low fat diet and are receiving pancreatic extract. We have recently operated a 10th case, and the patient is alive 2 months later.

Key words: Pancreatitis, acute – Pancreatectomy, total.


Die Erfahrung hat die Gefahr eines Operationsaufschubs, die fragwürdige Wirksamkeit der Enzyminhibitoren und die Unzulänglichkeit einfacher Drainageverfahren gezeigt.


Hier wird an Hand von 9 Fällen über Indikation, Technik und Ergebnisse der totalen Pankreatektomie berichtet.

The definite improvement in prognosis of acute pancreatitis with necrosis results from better diagnosis with earlier operation leading more commonly to partial pancreatectomy.

Experience and time have shown the failure of putting off surgery, and the highly debatable efficacy of anti-enzymes and the insufficiency of simple drainage procedures [27, 15].

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On Professor Poilleux’s unit, where over the last 6 years we have treated 32 cases of acute necrotising pancreatitis, we have adopted a policy of wider and wider pancreatic resection, adapted to the extent of the glandular necrosis and we prefer, in cases with extensive lesions, immediate pancreatectomy.

We report here, the indications, technique and results of total pancreatectomy and 9 recent cases.

We are convinced that surgical treatment with complete removal of necrotic tissue and the extra-pancreatic lesions, is alone likely to lead to a cure. The totally unforeseeable course of pancreatitis with necrosis, the danger of leaving diseased parenchyma behind, which leads to recurrence of the disease, the severity of the prognosis, have led us to carry out total pancreatectomy whenever 2/3rds of the latter shows apparently irreversible lesions or when the head and the body of the pancreas show definite necrosis, and the general condition of these patients shows dissemination of the process, e.g. septicemia, pyemia, oligoanuria, encephalopathy.

This attitude may be considered in 3 stages:
1. early (pre-operative) diagnosis of necrosis,
2. operative assessment of the degree and extent of the lesions of necrosis,
3. indications for total removal of the pancreas.

1. Pre-Operative Diagnosis of Necrosis

This results from the simultaneous presence of the well known clinical, laboratory and radiological signs with “signs of severity”.

Clinical Signs: Severe pain, prolonged shock, high fever, jaundice, gastrointestinal hemorrhage, encephalopathy, oligo-anuria, persistent/abdominal rigidity, paralytic ileus (both flatus and faeces).

Laboratory Signs: Constantly high serum amylase, blood sugar greater than 2 g/l, hypocalcemia, fall in hematocrit, high white cell count.

Radiological Signs: Early displacement of the stomach or duodenum, modifications in the common bile duct noted on cholangiography.

When after 3 or 4 days of satisfactory medical treatment, the laboratory or clinical signs are not frankly improved, when the signs of severity are on the contrary increased, e.g. raised white cell count, jaundice, g.-i. hemorrhage, encephalopathy, presence of an abdominal mass, then one must operate.

Thus, the patient will be operated on between the 3rd and 6th day after admission, at which stage the lesions of pancreatic necrosis are almost always visible and well developed, where there is still little spread and infection is not yet widespread.

2. Assessment of the Lesions

Laparotomy permitted discovery of lesions of which we may distinguish two types: frank lesions, equivocal or hidden lesions.
1. Frank lesions are lesions of definite necrosis or necrosis and hemorrhage, friable, grey, black or violet, suggesting definite irreversibility; here removal is essential. To facilitate this assessment we have adopted Edelman and Boutelier’s classification [7] overall necrosis, cephalic, isthmic, corporo-caudal necrosis,