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Unresectable Pancreatic Head Cancer: Double Palliative By-pass with a Single Roux-en.Y Jejunal Loop.

Corresponding Author:
Dr. Antonio Manenti,
Associate Professor, Department Surgery - Italy

Submitting Author:
Dr. Antonio Manenti,
Associate Professor, Department Surgery - Italy

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Author(s): Manenti A

Abstract

The unequivocal diagnosis of unresectability of a tumour of the head of pancreas is often challenging, and demands a careful abdominal exploration. In this case a double palliative bypass, biliary and gastro-duodenal is advisable; it can be easily constructed on the same Roux-en-Y jejunal loop, with a sequential hepatico-jejunostomy and gastro-enterostomy.

Introduction

In case of unresectable tumour of the head of the pancreas, a biliary diversion is mandatory, while in absence of clinically overt duodenal obstruction, a prophylactic alimentary bypass remains controversial , considering the possible post-operative complications or malfunctions (vicious circle between stomach, duodenum and the constructed gastroenterostomy; afferent loop syndrome; gastroparesis; etc.) (1,2,3,4,5). For these reasons, in patients with reasonable expectance of life, we have modified the surgical technique ,realizing at the same time a double sequential by-pass, biliary and gastric, using a single Roux-en-Y jejunal loop. This policy has been already experimented in the treatment of chronic pancreatitis (6).

Methods

After a careful abdominal exploration, a cholecystectomy is performed, followed by dissection and transection of the common bile duct. Then, a Roux-en-Y intestinal loop, long 70-80 cm is prepared dividing the jejunum 20-30 cm from the ligament of Treitz, and selecting the segment which can be easily brought up to the sub-hepatic space through a window in the right transverse mesocolon, and approximated to the cut end of the common bile.

A hepatico-jejunostomy, usually termino-lateral, is constructed . A trans-anastomotic Kehr's T tube can assure a temporarily external bile drainage. At a distance of 40 cm , and through a second incision in the mesocolon, left to the middle colic vessels, the same jejunal loop is used for a posterior retrocolic gastro-enterostomy, well away from the site of neoplastic involvement of the stomach or duodenum . Finally the intestinal continuity is restored 20 cm downstream , by a termino-lateral jejuno-jejunal anastomosis (Illustration 1). A chemical splancnicectomy can be added.

Discussion

In our experience of 25 cases, through the years 2005-2010, no technical difficulties were encountered, also in case of obesity or big tumour bulk. The post-operative course was always uneventful on the surgical plane, and the functional results were satisfactory, without symptoms of delayed gastric emptying, alkaline gastritis , or dumping syndrome. The X-ray controls always demonstrated a prevalent function of the new gastro-jejunostomy over the old gastro-duodenal outlet, which later becomes progressively more compressed and dislocated.

These satisfactory results can be ascribed to the simplicity of our technique , which permits to avoid more complex procedures, as duodenal transection or exclusion, gastric antrectomy, etc. Besides, the use of a Roux-enY jejunal loop, prevent any tension on both the anastomosis.

It can be preparation with only a simple procedure of dissection and partial transection of the mesentery, at a good distance from the area of possible neoplastic involvement and with a limited damage of the autonomic innervation (7).

Other technical advantages have to be outlined: the proximal location of the biliary anastomosis and the distance from the gastric diversion prevents reflux of alimentary content in the biliary tree and consequent ascending cholangitis.

Today palliation of biliary and gastro-duodenal malignant obstruction can be realized also with an endoscopic simultaneous or sequential approach (8,9,10). But it can be admitted that in good risk patients, with uncertain radiological signs of radical inoperability, a careful and complete surgical open

abdominal exploration continues to be the gold diagnostic standard ,and surgical palliation procedures still offers more acceptable clinical outcomes (11).
Until today only small series of laparoscopic approach have been reported, and the availability of this technique still remains limited (12,13).

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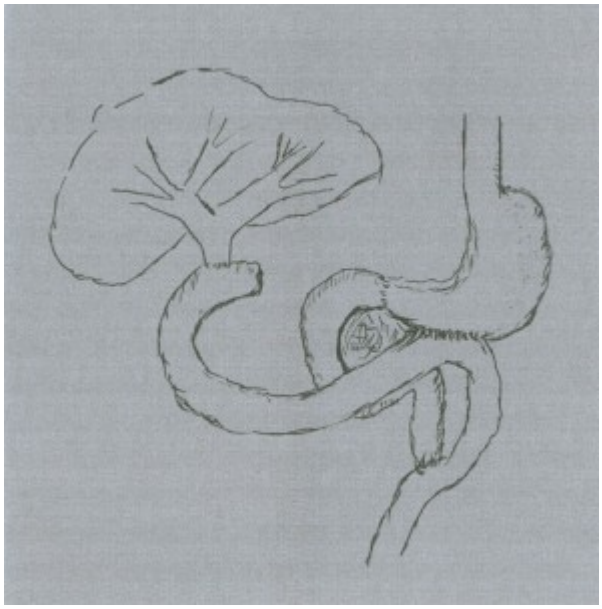
Illustrations

Illustration 1

Schematic drawing. Sequential double palliative bypass on the same Roux-en-Y jejunal loop: hepatico-jejunostomy and gastro-enterostomy.



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