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

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

**Article ID:** WMC002029
**Article Type:** Original Articles
**Submitted on:** 18-Jul-2011, 11:43:26 AM GMT  **Published on:** 19-Jul-2011, 07:29:43 PM GMT
**Article URL:** http://www.webmedcentral.com/article_view/2029
**Subject Categories:** SURGICAL TECHNIQUE
**Keywords:** Cancer of the Pancreas, Palliative Bypass, Roux-en-Y Jejunal Loop

**How to cite the article:** Manenti A . Unresectable Pancreatic Head Cancer: Double Palliative By-pass with a Single Roux-en.Y Jejunal Loop. . WebmedCentral SURGICAL TECHNIQUE 2011;2(7):WMC002029

**Source(s) of Funding:**
None

**Competing Interests:**
None
Unresectable Pancreatic Head Cancer: Double Palliative By-pass with a Single Roux-en-Y Jejunal Loop.

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-en-Y 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).

Reference(s)

2. Lucas C.E., Ledgerwood A.M., Saxe
J.M. Antrectomy: a safe and effective bypass for
Un complément à l’anastomose gastro-jéjunale
palliative dans le cancer du pancréas. Presse Méd.
Stomach-preserving gastric by-pass for unresectable
5. Falconi M., Hilal M., Salvia R. et al. Prophylactic
pylorus-preserving gastric by-pass for unresectable
6. Manenti A., Speranza M., Buttazzi A. Triple
derivation, biliare, gastrique et du Wirsung sur anse
7. Tomita R., Fujisaki S., Tanjoh K., Fukuzawa M.
Relation between jejunal interdigestive migrating
motor complex and quality of live after total
gastrectomy with Roux-en-Y reconstruction for early
Sequential or simultaneous placement of
self-expandable metallic stents for palliation of
malignant biliary and duodenal obstruction due to
unresectable pancreatic head carcinoma.
9. Srikureja W., Chang K.J. Endoscopic palliation of
10. Kaw M., Sing S., Gagneja H. Clinical outcome of
simultaneous self-expandable metal stents for palliation of
malignant biliary and duodenal obstruction.
Combined biliary and gastric bypass procedures as
effective palliation for unresectable malignant disease.
12. Rhodes M., Nathanson L., Fielding G.
Laparoscopic biliary and gastric bypass: a useful
adjunct in the treatment of carcinoma of the pancreas.
Illustrations

Illustration 1

Disclaimer

This article has been downloaded from WebmedCentral. With our unique author driven post publication peer review, contents posted on this web portal do not undergo any prepublication peer or editorial review. It is completely the responsibility of the authors to ensure not only scientific and ethical standards of the manuscript but also its grammatical accuracy. Authors must ensure that they obtain all the necessary permissions before submitting any information that requires obtaining a consent or approval from a third party. Authors should also ensure not to submit any information which they do not have the copyright of or of which they have transferred the copyrights to a third party.

Contents on WebmedCentral are purely for biomedical researchers and scientists. They are not meant to cater to the needs of an individual patient. The web portal or any content(s) therein is neither designed to support, nor replace, the relationship that exists between a patient/site visitor and his/her physician. Your use of the WebmedCentral site and its contents is entirely at your own risk. We do not take any responsibility for any harm that you may suffer or inflict on a third person by following the contents of this website.