Severe intestinal bleeding due to left-sided portal hypertension after pancreatoduodenectomy with portal resection and splenic vein ligation

Abstract
Pancreatoduodenectomy (PD) with portal vein (PV)/superior mesenteric vein (SMV) resection is well accepted for pancreatic head cancer because of the improvement in margin-negative resection and survival rates, without increasing postoperative morbidity and mortality in high volume centers. There is controversy in the surgical literature regarding the safety of splenic vein (SV) ligation during a PD with PV-SMV resection. Simple SV ligation has been associated with the development of left-sided portal hypertension, gastrointestinal bleeding and hypersplenism over the long term. We report a rare case of severe intestinal bleeding due to left-sided portal hypertension in a patient who underwent a PD with PV-SMV confluence segmental resection and splenic ligation, preserving left gastric vein and inferior mesenteric vein, for cephalic pancreatic adenocarcinomas seven months previously.

Keywords: left-sided portal hypertension, pancreatoduodenectomy, pancreatic cancer, portal vein resection, intestinal bleeding

Introduction
In patients with pancreatic head cancer, tumor invasion of the portal vein (PV) or superior mesenteric vein (SMV) is common because of the close anatomical relationship of the pancreatic head and uncinate process to the venous portal system. Pancreatoduodenectomy (PD) with portal vein or superior mesenteric vein resection is well accepted for pancreatic head cancer because of the improvement in margin-negative resection and survival rates, without increasing postoperative morbidity and mortality in high volume centers. Simple SV ligation may result in sinistral (left-sided) portal hypertension, gastrointestinal bleeding and hypersplenism over the long term. We report a case of severe intestinal bleeding due to left-sided portal hypertension in a patient who underwent a PD with PV-SMV confluence segmental resection and splenic ligation, for pancreatic adenocarcinoma, seven months previously that have required a massive haemostatic resuscitation and surgical procedure (Figure 1).

Case presentation
A 58-year-old man with pancreatic head cancer and no comorbidity has been undergone, at our institution, a PD with Total Mesopancreas Excision, PV-SMV confluence segmental resection with prosthetic
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All authors of this work have met all of the following criteria:

a. Substantial contributions to the conception or design of the work, or the acquisition, analysis, or interpretation of data for the work.

b. Drafting the work or revising it critically for important intellectual content.

c. Final approval of the version to be published.

Conflict of interest
Authors declare there is no conflict of interest in publishing the article.

Patient consent form
Informed consent was obtained from patient.

References


