Esophagectomy after previous pancreatic surgery – challenges and approaches

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Introduction

- Esophagectomy (EE)→ mainstay of curative cancer treatment in esophageal cancer (EC).
- Restoration of continuity → mostly with gastric pull-up.
- Aging population, improvements of surgical technique and oncological treatment options → more patients with previous surgery in the upper abdomen (e.g. pancreatic surgery).
- Data on esophagectomy after pancreatic surgery is sparse.

Clinical cases

65-year-old male
- adenocaricinoma of distal esophagus
- previous adenocarcinoma of pancreatic tail
- left pancreatic resection with splenectomy 11 years ago
- mesenteric angiography to rule out injury of the gastroepiploic arcade and assess blood supply of other possible conduits (colon)
- McKeown-EE with gastric conduit

61-year-old male
- adenocaricinoma of distal esophagus
- previous IPMN in pancreatic head
- postpyloric duodenopancreatectomy 5 years ago
- McKeown-EE with colonic interposition (colo-gastrostomy)

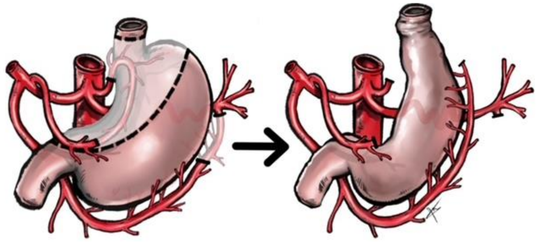


Image 1: stomach before and after resection: blood supply in gastric pull-up lies on gastroepiploic arcade



Image 2: angiography of coeliac trunc and gastroepiploic arcade

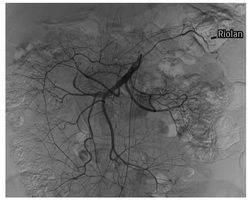


Image 3: angiography of colonic blood suppy (riolan-anastomoisis)

Conclusion

EE for EC after pancreatic surgery is challenging but feasible. Adequate patient selection and preoperative preparation are crucial to manage the difficulties associated with previous abdominal surgery.

Challenges

- adhesions
- altered anatomy
- changes in blood supply (> gastroepiploic arcade)

- functional: diabetes, gastroparesis, malassimilation

Common pancreatic interventions

duodeno-pancreatectomy
↓
divison of GDA (which branches into gastroepiploic artery)
+
modification of instestinal continuity
↓
Gastric pull-up difficult

left pancreatic resection
+/-
splenectomy
+/-
division of gastroepiploic artery
↓
Gastric pull-up potentially possible

Approaches

adequate preoperative preparation:
- angiography
- evaluation of alternative conduits
- colonoscopy