




TOTAL MESOPANCREAS EXCISION

RESSEÇÃO TOTAL DO MESOPÂNCREAS

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ABSTRACT

Total mesopancreas resection is a surgical procedure associated with duodenopancreatectomy for pancreatic cancer that aims to reduce the risk of locoregional recurrence or compromised surgical margins. The important moments of the procedure are presented.

Keywords: *Pancreatic cancer, Mesopancreas.*

RESUMO

A resseção total do mesopâncreas é um procedimento cirúrgico associado à duodenopancreatectomia cefálica por cancro do pâncreas que visa reduzir o risco de recidiva locoregional ou margens cirúrgicas comprometidas. Apresentam-se os momentos importantes do procedimento.

Palavras-chave: *cancro do pâncreas, Mesopâncreas.*

Mesopancreas is an areolar and adipose retropancreatic tissue with peripheral nerves, blood and lymphatic vessels and lymph nodes located dorsally to the pancreas and reaching the mesenteric vessels¹.

Total mesopancreas excision (TMpE) in pancreatoduodenectomy has been advocated in pancreatic cancer in order to clear the superior mesenteric artery margin from invasion and remove any metastases from 16 a and 16 b lymph node station².

O mesopâncreas é constituído pelo tecido retropancreático areolar e adiposo com nervos periféricos, vasos sanguíneos e linfáticos e gânglios linfáticos localizados dorsalmente ao pâncreas e atingindo os vasos mesentéricos¹.

A excisão total do mesopâncreas (TMpE) na duodenopancreatectomia tem sido defendida no cancro do pâncreas com o objectivo de remover os tecidos da margem direita da artéria mesentérica superior mitigando a sua invasão e removendo quaisquer metástases da estação ganglionar 16a e 16b².



TMpE is safe and feasible for pancreatic head cancer and helps increase the R0 resection rate and improve the clinical outcomes³.

We present images of this procedure performed at the Surgical Oncology Service of IPO-Porto during a surgical procedure in a patient with a malignant tumor of the ampulla of Vater that has invaded the duodenum and pancreas (figures 1-5).



FIGURE 1 – Retroduodenal surface (LN 16 – lymph nodes station 16), SMV – superior mesenteric vein, SMA – superior mesenteric artery.

FIGURA 1 – Face retro-duodenal (G 16 – estação ganglionar 16), VMS – veia mesentérica superior, AMS – artéria mesentérica superior.

A TMpE é segura e viável na duodenopancreatectomia cefálica e ajuda a aumentar as taxas de ressecção R0 e melhorar o prognóstico³.

Apresentamos imagens deste procedimento realizado no Serviço de Oncologia Cirúrgica do IPO-Porto durante um procedimento cirúrgico num doente com tumor maligno da ampola de Vater que invadia o duodeno e o pâncreas (figuras 1-5).

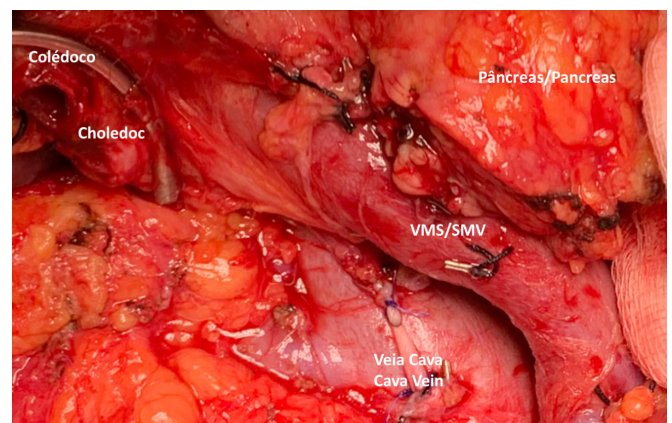


FIGURE 2 – Retro-duodenal and pancreatic surface after removal of the Mesopancreas, SMV – superior mesenteric vein.

FIGURA 2 – Face retro-duodenal e pancreática após a remoção do Mesopâncreas, VMS – veia mesentérica superior.

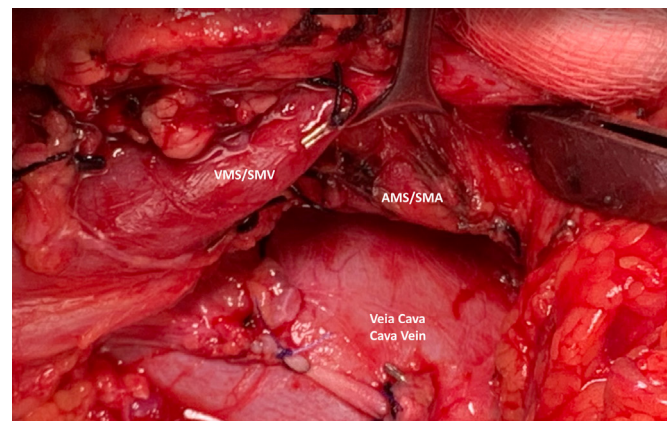


FIGURE 3 – Retro-duodenal and pancreatic surface after removal of the Mesopancreas, SMV – superior mesenteric vein, SMA – superior mesenteric artery.

FIGURA 3 – Face retro-duodenal e pancreática após a remoção do Mesopâncreas, VMS – veia mesentérica superior, AMS – artéria mesentérica superior.



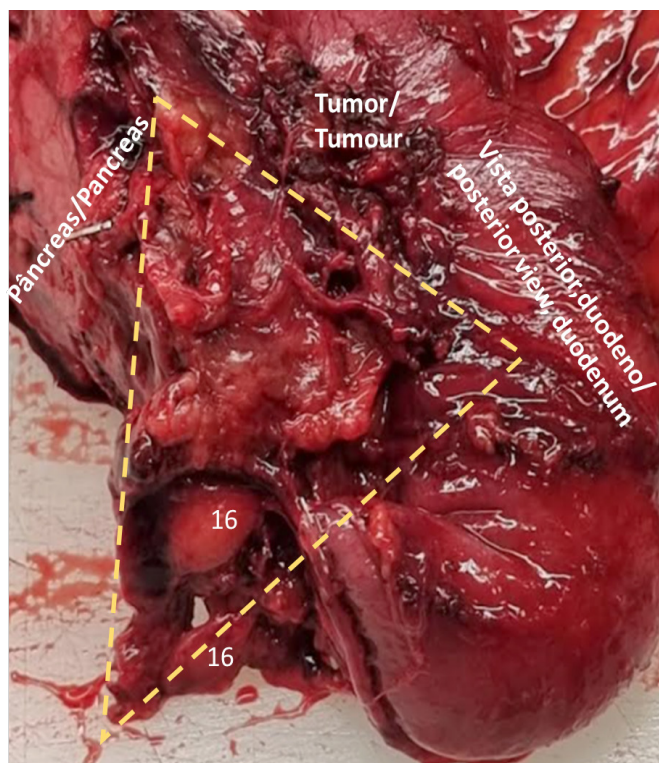


FIGURE 4 – Surgical specimen (view from the posterior region of the duodenum), yellow triangle: mesopancreas, 16 (lymph nodes of the 16 station).

FIGURA 4 – Peça cirúrgica (vista da região posterior do duodeno), triângulo amarelo: mesopâncreas, 16 (gânglios linfáticos da estação ganglionar 16).

Jingyong Xu, et al. clinical study, a total of 101 cases were included, and 89 of the cases were followed up. They found a significantly lower 6-month and 1-year local recurrence rates (7.8% vs. 23.7%, $P=0.036$; 18.2% vs. 39.5%, $P=0.018$), and lower overall recurrence rates in TMpE group. DFS was significantly longer in TMpE group which might be due to lower local recurrence rate (16.9 months vs. 13.4 months, $P=0.044$), while the difference in OS was not significant⁴.

This operation has also been called the TRIANGLE operation. After neoadjuvant therapy for locally advanced pancreatic cancer, this surgical exploration should be attempted in patients with stable disease or remission⁵.

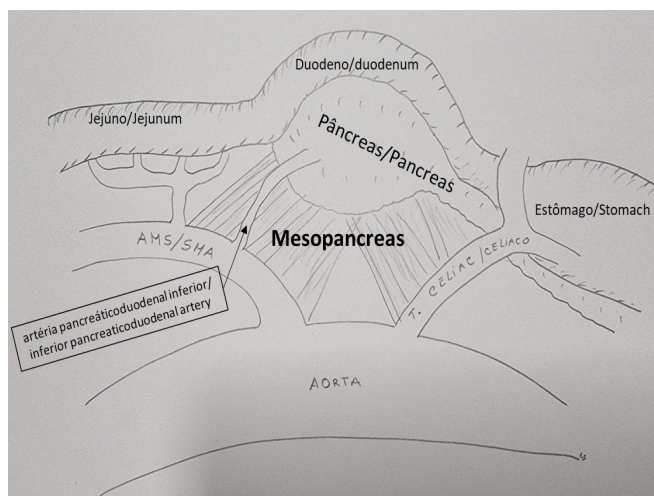


FIGURE 5 – Mesopancreas (scheme) adapted from: Inoue, Y., & Saiura, A. (2017). Mesopancreas Excision for Pancreatic Cancer⁶.

FIGURA 5 – Mesopâncreas (esquema) adaptado de: Inoue, Y., & Saiura, A. (2017). Mesopancreas Excision for Pancreatic Cancer⁶.

Jingyong Xu, et al. num estudo clínico, que envolveu 101 casos e em que 89 destes foram acompanhados. Os autores encontraram taxas de recidiva local significativamente menores aos 6 meses e 1 ano (7,8% vs. 23,7%, $p = 0,036$; 18,2% vs. 39,5%, $p = 0,018$) e menores taxas de recorrência global no grupo TMpE. A sobrevivência livre de doença foi significativamente mais longa no grupo TMpE, o que pode ser devido à menor taxa de recidiva local (16,9 meses vs. 13,4 meses, $p = 0,044$), contudo sobrevivência global não foi estatisticamente diferente nos dois grupos⁴.

Essa operação também foi também apelidada de operação Triângulo. Após o tratamento neoadjuvante para cancro do pâncreas localmente avançado, este tipo de exploração cirúrgica deve ser realizada em doentes com doença estável ou em remissão⁵.



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Data de recepção do artigo:

23/11/2021

Data de aceitação do artigo:

27/12/2021

