When arterial resection is justified in pancreatic cancer? Results of 40 pancreatic resections with resection of truly involved celiac and/or common hepatic artery

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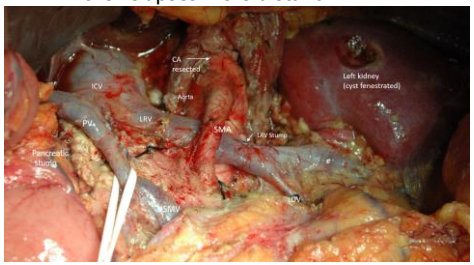
Background 1.It is believed that arterial involvement in pancreatic cancer (PC) is a sign of so far advanced disease that pancreatic resection(PR) is meaningless; 2.Distal pancreatectomy(DP) with celiac artery resection(DPCAR) is justified option for locally advanced PC

Aim Assessment of the rates of morbidity, mortality, true pathological artery involvement and R0- resections, overall and disease-free survival after PRs with celiac (CA) and/or common hepatic artery (CHA) resections(AR).

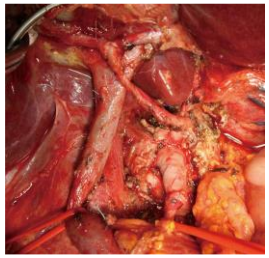
Patients and methods Patients with pancreatic ductal adenocarcinoma **(n**33), gastric cancer(1) and neuroendocrine tuors (n6) underwent 40 PRs with AR without preoperative occlusion of CHA, 38 without arterial reconstructions(2009-2019). Age 54-76y. ECOG-0-1. Adjuvant chemotherapy,n19, neoadjuvant,n11 with better tendency. IOUS and vascular fluorescence (ICG) were there main methods for assessment of liver and stomach ischemia.

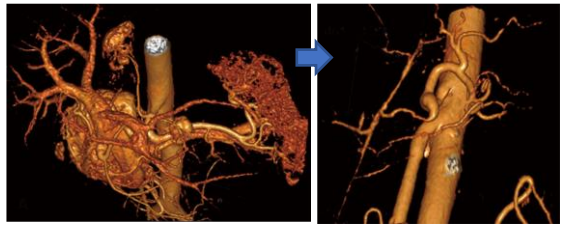
Results: The rate of pathological CA/CHA involvement – 100%. Overall rate of R0-resections 87.5%, for PDAC 88%, vein resections during 36 DPCAR -12(33%). Morbidity: 19 (47.5%), pancreatic fistula Grade B/C -15(37,5%), mortality- 3 (7,5%), median OS- 25 months, median DFS -20 months, overall 5-y survival - 42%, actual 5-y survival - 19%. No liver and bowel ischemia, gastric ischemia – 15% (1 perforation). All the relapses were distant.

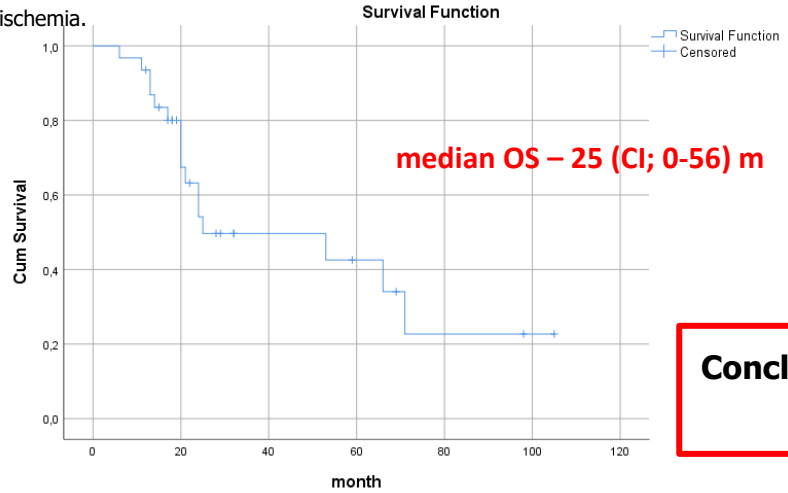


Typical view of the R0 posterior RAMPS with the celiac artery (CA) resection without arterial reconstruction (DP CAR, mAppleby).

Total duodenopancreatectomy and splenectomy with superior mesenteric, left and right hepatic arteries resection, excision of common hepatic and proper hepatic arteries and completion of vascular reconstruction prior to right adrenalectomy

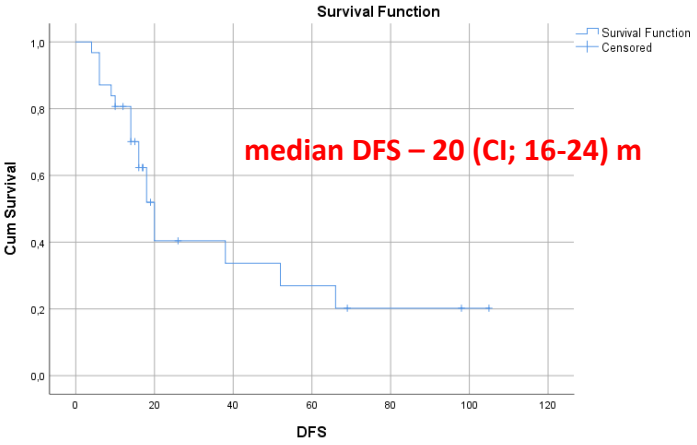






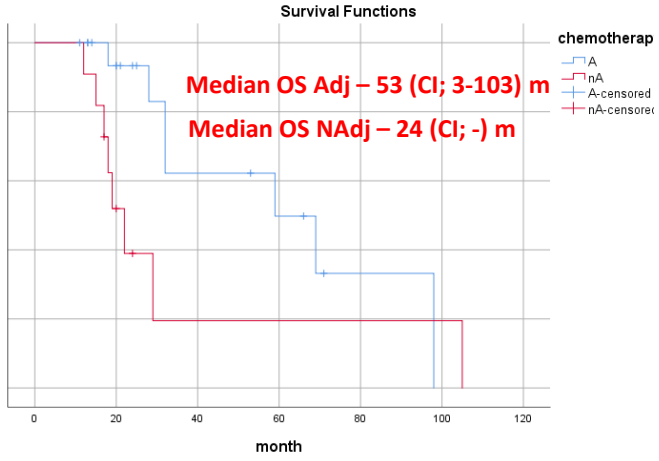
median OS – 25 (CI; 0-56) m

Conclusion: Selection, R0-resection and, possibly, neoadjuvant treatment with acceptable morbidity and mortality justifies arterial resections for PDAC



median DFS – 20 (CI; 16-24) m

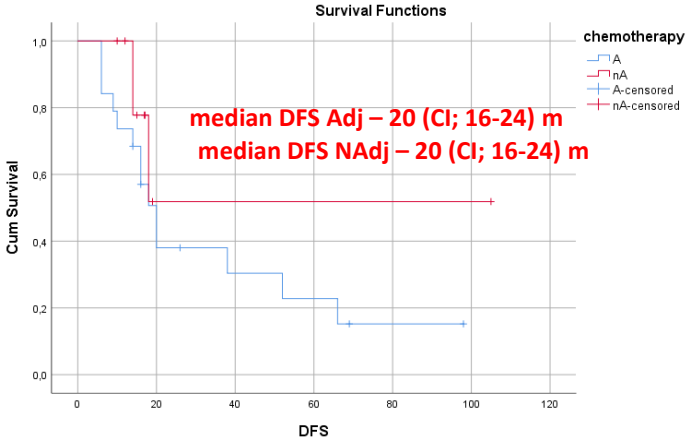
Median OS – 25 (CI; 0-66) m



Median OS Adj – 53 (CI; 3-103) m

Median OS NAdj – 24 (CI; -) m

median DFS – 20 (CI; 16-24) m



median DFS Adj – 20 (CI; 16-24) m

median DFS NAdj – 20 (CI; 16-24) m