Survival after curative pancreaticoduodenectomy for ampullary adenocarcinoma in a South American population: A retrospective cohort study

Supervivencia después de pancreaticoduodenectomía curativa por adenocarcinoma ampular en una población sudamericana: un estudio de cohorte retrospectivo

INVESTIGADORES: Ramiro Manuel Fernandez-Placencia, Paola Montenegro, Melvy Guerrero, Mariana Serrano, Emperatriz Ortega, Mercedes Bravo, Lourdes Huanca, Stéphane Bertani, Juan Manuel Trejo, Patricia Webb, Jenny Malca-Vasquez, Luis Taxa, Alberto Lachos-Davila, Juan Celis-Zapata, Carlos Luque-Vasquez, Eduardo Payet, Eloy Ruiz, Francisco Berrospi.

REVISTA: World J Gastrointest Surg 2022 Jan 27;14(1):24-35. doi: 10.4240/wjgs.v14.i1.24.

TIPO DE CANCER: Abdomen

ABSTRACTO: Background: Ampullary adenocarcinoma (AAC) is a rare neoplasm that accounts for only 0.2% of all gastrointestinal cancers. Its incidence rate is lower than 6 cases per million people. Different prognostic factors have been described for AAC and are associated with a wide range of survival rates. However, these studies have been exclusively conducted in patients originating from Asian, European, and North American countries. Aim: To evaluate the histopathologic predictors of overall survival (OS) in South American patients with AAC treated with curative pancreaticoduodenectomy (PD). Methods: We analyzed retrospective data from 83 AAC patients who underwent curative (R0) PD at the National Cancer Institute of Peru between January 2010 and October 2020 to identify histopathologic predictors of OS. Results: Sixtynine percent of patients had developed intestinal-type AAC (69%), 23% had pancreatobiliary-type AAC, and 8% had other subtypes. Forty-one percent of patients were classified as Stage I, according to the AJCC 8th Edition. Recurrence occurred primarily in the liver (n = 8), peritoneum (n = 4), and lung (n = 4). Statistical analyses indicated that T3 tumour stage [hazard ratio (HR) of 6.4, 95% confidence interval (CI) of 2.5-16.3, P < 0.001], lymph node metastasis (HR: 4.5, 95%CI: 1.8-11.3, P = 0.001), and pancreatobiliary type (HR: 2.7, 95%CI: 1.2-6.2, P = 0.025) were independent predictors of OS. Conclusion: Extended tumour stage (T3), pancreatobiliary type, and positive lymph node metastasis represent independent predictors of a lower OS rate in South American AAC patients who underwent curative PD.

Clinicopathological factors associated with recurrence in patients undergoing resection of pancreatic solid pseudopapillary neoplasm

Factores clinicopatológicos asociados a recidiva en pacientes sometidos a resección de neoplasia sólida pseudopapilar pancreática

INVESTIGADORES: Oscar Paredes, Kori Paredes, Yoshikuni Kawaguchi, Carlos Luque-Vasquez, Iván Chavez, Juan Celis, Eduardo Payet, Eloy Ruiz, Francisco Berrospi.

REVISTA: Discov Oncol. 2021 Nov 22;12(1):53. doi: 10.1007/s12672-021-00451-4.

TIPO DE CÁNCER: Abdomen

ABSTRACTO: Purpose: Solid pseudopapillary neoplasm (SPN) is an uncommon pathology with a low-grade malignancy. Surgery is the milestone treatment. Nevertheless, despite appropriate management, some patients present recurrence. Risk factors associated with recurrence are unclear. The objective was to identify the clinicopathological factors associated with recurrence in patients with SPN treated with pancreatic resection. Methods: Medical records of patients treated with pancreatic resection during 2006-2020 were evaluated. Patients with histological diagnosis of SPN were included. Survival analysis was performed to identify the clinicopathological factors related to recurrence. Results: Seventy-four patients were diagnosed with SPN; 70 (94.6%) patients were female, and the median age was 20 years old. The median tumor diameter was 7.9 cm. Multivisceral resection was performed in 9 (12.2%) patients. Four (5.4%) patients presented lymph node metastasis.R0 resection was achieved in all cases. Six (8%) patients presented recurrence and the liver was the most frequent recurrence site (n = 5).After a median follow-up of 40.2 months, 9 (12%) patients died. Five (6.8%) patients died of disease progression. The 1-3- and 5-year overall survival (OS) was 97.1%, 90.2% and 79.9%, respectively. The 1-3-and-5-year recurrence-free survival (RFS) was 98.4%, 89.9% and 87%, respectively. In the univariate Cox-regression analysis, age ≥ 28 years(HR = 8.61, 95% CI 1.1-73.8), tumor diameter ≥ 10 cm(HR = 9.3, 95% CI 1.12-79.6), invasion of adjacent organs

(HR = 7.45, 95% CI 1.5-36.9), lymph node metastasis (pN +) (HR = 16.8, 95% CI 2.96-94.9) and, AJCC Stage III (HR = 10.1, 95% CI 1.2-90.9) were identified as predictors for recurrence. Conclusions: SPN is more frequently diagnosed in young women with a good overall prognosis after an R0 surgical resection even with disease recurrence. Age \geq 28 years, larger tumors \geq 10 cm, invasion of adjacent organs, lymph node metastasis(pN +) and, AJCC Stage III were predictors factors of recurrence in resected SPN

The need to focus on long-term outcomes after transanal total mesorectal excision for rectal cáncer

La necesidad de centrarse en los resultados a largo plazo después de la escisión mesorrectal total transanal para el cáncer de recto

INVESTIGADORES: Michelle Antonella Angulo-Cruzado, Jorge Luna-Abanto

REVISTA: Colorectal Dis 2022 Jan 25. doi: 10.1111/codi.16067. Online ahead of print.

TIPO DE CANCER: Abdomen

The relationship between tumour infiltrating lymphocytes, Epstein-Barr virus and Helicobacter pylori infection in gastric cáncer

La relación entre los linfocitos infiltrantes de tumores, el virus de Epstein-Barr y la infección por Helicobacter pylori en el cáncer gástrico

INVESTIGADORES: Carlos Castañeda, Miluska Castillo, Luis Bernabe, Nancy Suarez, Matteo Fassan, Joselyn Sanchez, Katherine Tello, Raul Alatrista, Ivan Chavez, Eloy Ruiz, Yaqueline Bazan, Fernando Barreda, Daniel Valdivia, Wei Meng, Arnab Chakravarti, Juvenal Sanchez, Luis Taxa, Paola Montenegro.

REVISTA: Ecancermedical science. 2022 Mar 1;16:1362. doi: 10.3332/ecancer.2022.1362. eCollection 2022.

TIPO DE CÁNCER: Abdómen

ABSTRACTO: Objective: Epstein-Barr virus (EBV) and Helicobacter pylori (HP) infections have been extensively recognised as gastric cancer (GC) triggers, and recent publications suggest they could behave as predictive markers for immune-modulating therapies. Tumour-infiltrating lymphocytes (TILs) have also been identified as a predictive biomarker for immunotherapy in different malignancies. This study aimed to investigate the association between EBV and HP infection with TIL levels in GC. Methods: TIL evaluation in haematoxylin-eosin was performed by a pathologist and density of CD3, CD8 and CD163 positive (immunohistochemistry staining) immune cells was calculated with the use of digital pathology software. EBV infection was detected by in situ hybridisation (ISH) and by quantitative polymerase chain reaction (qPCR). Methylation status of EBV-related genes was detected by PCR and a methylome analysis was performed by the Illumina Infinium MethylationEPIC BeadChip. HP status was detected by qPCR. Results: We included 98 resected GC Peruvian cases in our evaluation. Median TIL percentage was 30. The proportion of EBV+ detected by ISH was 24.1%, of EBV+ detected by qPCR was 41.8%, while 70% showed methylation of EBV-related genes, and 58.21% of cases were HP+. Younger age (p = 0.024), early stages (p = 0.001), HP+ (p = 0.036) and low CD8 density (p = 0.046) were associated with longer overall survival (OS). High TIL level was associated with intestinal subtype (p < 0.001), with grade 2 (p < 0.001), with EBV qPCR+ (p = 0.001), and with methylation of EBV-related genes (p = 0.007). Cases with high TIL level and cases that are EBV positive share eight genes with similarly methylated status in the metabolomic analysis. High CD8 density was associated with EBV PCR+ (p = 0.012) and HP- (0.005). Conclusion: Lower CD8 density and HP+ predict longer OS. High TIL level is associated with EBV+ and methylation of EBV-related genes, while lower CD8 density is associated with HP+ GC.