



POSTER PRESENTATIONS

XII Meeting of the Spanish Pancreatic Club (Club Español Pancreático)

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1. MODULATION OF PERITONEAL MACROPHAGES ACTIVATION DURING EXPERIMENTAL ACUTE PANCREATITIS

S. Gea and D. Closa

Departamento de Patología Experimental, IIBB-CSIC, IDIBAPS y CIBEREHD, Barcelona, Spain.

Objectives: During Acute pancreatitis (AP), macrophages can follow different activation pathways. In this study we evaluated the phenotype acquired by peritoneal macrophages in this disease.

Methods: In a model of pancreatitis induced by taurocholate in rats we analyzed the expression of genes characteristics for different activation pathways presented by macrophages. We also analyzed the effect of IL4 and IL13 as modulators of this activation.

Results: Peritoneal macrophages show M1 activation in the early stages of the disease. In vitro, IL4 and IL13 treatment reverses the activation of macrophages from M1 to M2 phenotype, but fails to modulate in vivo the response of these cells. Finally we found that IL4 has a shorter half-life in ascites than in plasma.

Conclusions: Peritoneal macrophages adopt a pro-inflammatory activation beginning of the PA. These macrophages can be reprogrammed in vitro to an inflammatory phenotype. However, this treatment is not sufficient to reverse the phenotype in vivo. This lack of effect appears to be related with the degradation of interleukins by pancreatic hydrolases present in the peritoneal cavity.

2. HEMOGLOBIN IN ASCITIC FLUID DERIVED FROM HAEMOLYSIS INCREASES SYSTEMIC EFFECTS IN ACUTE PANCREATITIS

J. Pereda^a, S. Pérez Garrido^a, D. Royo^a, J. Escobar^a, L. Aparisi^b, L. Sabater^c and J. Sastre^a

^aDepartment of Physiology, University of Valencia, Spain.

^bDepartment of Pancreatic Function; ^cDepartment of Surgery, University Clinic Hospital, Valencia, Spain.

Objectives: To study the presence of free haemoglobin in ascitic fluid and its relevance in acute pancreatitis (AP).

Methods: Necrotic AP model induced by intraductal perfusion of 3.5% taurocholate in Wistar male rats, sacrificed at 0, 1, 3, 6 and

24 hours. Free haemoglobin and peroxidase activity were determined by spectrophotometry and western blot. Purified haemoglobin (2.4% 2.5 ml) was injected i.p. in animals with AP and plasmatic isoprostanes, haematocrit, volume of ascitic fluid and fat necrosis were determined at 6h.

Results: In rats with AP we observed ascitic fluid production and increased haematocrit. Western blot with luminol showed peroxidase activity in ascitic fluid associated with haemoglobin, which increases during the first hours of PA and decreased at 24h. Ascitic fluid exhibited haemolytic properties in vitro. Finally, haemoglobin injection in AP increased fat necrosis, haematocrit, ascitic fluid and plasma levels of isoprostanes.

Conclusions: Peroxidase activity due to the presence of free haemoglobin was observed in ascitic fluid in AP, which contributes to the severity of the disease.

3. FREQUENCY AND CHARACTERISTIC OF PANCREATIC METASTASIS FROM A LARGE SERIES OF SOLID PANCREATIC MASSES

J. Iglesias-García^{a,b}, D. Collado-Pacheco^c, P. Palomares-Rivas^d, J. García-Verdejo^e, R. Ferreiro^{a,b}, J. Lariño-Noia^{a,b} and J.E. Domínguez-Muñoz^{a,b}

^aGastroenterology Department; ^bFoundation for Research in Digestive Diseases (FIENAD), University Hospital of Santiago de Compostela, Spain. ^cGastroenterology Department, University Hospital Severo Ochoa, Leganés, Madrid, Spain. ^dGastroenterology Department, University Hospital San Cecilio, Granada, Spain. ^eGastroenterology Department, University Hospital Virgen de las Nieves, Granada, Spain

Introduction: Pancreatic metastases (PM) represent the 2-3% cases of solid pancreatic masses (SPM). With the absence of an know primary tumor, differential diagnosis between PM and other pancreatic malignancies remains a challenge, despite advances in imaging techniques.

Objectives: To determine the frequency and characteristics of PM in a large prospective series of SPM.

Methods: Retrospective analysis of all patients with SPM evaluated by EUS between January 2006 and December of 2010, identified from a prospectively collected endoscopy database.

Those patients with the final diagnosis of PM were included in the study. EUS procedures were performed under conscious sedation by the linear Pentax and Hitachi ultrasound device. Endosonographic features of PM were evaluated. Final diagnosis was based on EUS-guided fine needle aspiration (FNA) and/or surgery. Data are shown as mean \pm SD.

Results: A total of 449 patients with SPM were evaluated during the study period. 13 patients (2.9%) presented a PM (mean age 65, range 51-83, 9 female). Primary tumours were lung cancer (n = 3), GIST tumours (n = 2), breast cancer (n = 2), gastric cancer (n = 1), colon cancer (n = 1), renal cancer (n = 1), sarcoma (n = 1), myeloma (n = 1) and teratoma (n = 1). 10 tumours were located at the head of the pancreas and 3 at the body. Mean size of PM was 33.2 ± 12.4 . Features of these tumours were: solid appearance (n = 12), hypoechoic (n = 11), heterogeneous (n = 13) and with poorly defined borders (n = 12). 10 tumours were hypovascular, and 3 hypervascular. EUS features could not differentiate PM from other pancreatic malignant tumors.

Conclusions: PM represent 2.9% of SPM. Localization, size and EUS findings are indistinguishable from other pancreatic malignancies, thus EUS-guided FNA is crucial in this setting.

4. INFLUENCE OF FLUID THERAPY ON THE PROGNOSIS OF ACUTE PANCREATITIS: OBSERVATIONAL STUDY ADJUSTED BY PROPENSITY SCORE

C. Sánchez-Fortún, G. Soler, N. Moya-Hoyo, J. Martínez, M. Pérez-Mateo and E. de Madaria

Unidad de Patología Pancreática, Hospital General Universitario de Alicante, Spain.

Objectives: To assess the association between fluid administration below the first quartile (Q1) in the first 24 hours of admission for acute pancreatitis (AP) and the incidence of persistent organ failure (POF), development of acute collections and pancreatic necrosis (PN).

Methods: Retrospective analysis of a prospective database. We included patients older than 18 years admitted with acute pancreatitis between December 2007 and June 2011. Patient with organ failure at admission and undergoing hemodialysis were excluded. We evaluated the association between baseline variables dichotomized and administration of fluids below the Q1. Then we calculate a value of propensity score for each patient using variables that showed association. Thus, we prepared two groups of patients based on the amount of fluids administered within 24 hours ($< Q1$ and $\geq Q1$), selecting patients matched by equal propensity score ± 0.01 at a rate of 1:2.

Results: Five variables showed significant association with the administration of fluids below Q1 in the multivariate analysis: age over 60 years, emergency hematocrit $> 44\%$, white blood count $> 13,180/\mu\text{L}$, Charlson score ≥ 3 . Hematocrit over 44% was the only variable that showed significant association in multivariate analysis. We selected 219 patients by propensity score matching. Fluid

administration below Q1 showed no association with the development of POF ($p = 0.819$), acute collections ($p = 0.930$) and PN ($p = 0.159$).

Conclusions: Patients who received an amount of fluid in the first 24 hours below the first quartile did not show a worse outcome regarding the development of FOP, acute or PN collections.

5. EVALUATION OF N-ACETYL-CYSTEINE AND DEXAMETHASONE TREATMENTS IN ACUTE PANCREATITIS-INDUCED LUNG INJURY

L. Ramudo, M.A. Manso, S. Yubero and I. de Dios

Department of Physiology and Pharmacology, University of Salamanca, Spain.

Pulmonary complications are frequent during acute pancreatitis (AP). We investigated the effects of N-Acetylcysteine (NAC) and Dexamethasone (Dx) on lung injury in mild and severe AP. Mild and severe AP were induced in rats by bile-pancreatic duct obstruction (BPDO) and infusion of 3.5% sodium taurocholate (NaTc) into the bile-pancreatic duct, respectively. NAC (50 mg/kg) was given 1 hour before and 1 hour after AP and Dx (1 mg/kg) 1 hour after AP. Lungs were harvested for mRNA expression analysis of monocyte chemoattractant protein-1 (MCP-1), cytokine-induced neutrophil chemoattractant (CINC), P-selectin and intercellular adhesion molecule-1 (ICAM-1), myeloperoxidase (MPO) activity and histological examination. NAC downregulated MCP-1, CINC and P-selectin in BPDO- but not in NaTc-induced AP. Dx hindered the pulmonary upregulation of MCP-1, CINC, P-selectin and ICAM-1, in both mild and severe AP. Despite this, neither treatment reduced the lung injury developed during AP, in either the BPDO or NaTc model. Histological studies revealed that pulmonary insults did not vary in mild AP and were exacerbated in severe AP by NAC treatment. NAC reduced the lung MPO activity in mild but not in severe AP. Dx failed to reduce MPO activity and histological alterations either in BPDO- or NaTc-AP. We conclude that although NAC and Dx down-regulated inflammatory mediators in lungs during AP did not prevent leukocyte infiltration, which could be responsible for maintaining the lung injury. As a result, NAC aggravated the lung damage in severe AP and Dx failed to exert a beneficial effect in either mild or severe AP.

6. TRENDS IN MANAGEMENT OF PANCREATIC NECROSIS IN A UNIVERSITY TEACHING HOSPITAL

M.P. Rey-Riveiro, S. Carbonell-Morote, R. Saeta-Campo, J. Martínez, A. Zarco, M. Pérez-Mateo, F. Lluís and E. de Madaria

Unidad de Patología Pancreática, Hospital General Universitario de Alicante, Spain.

Introduction: Pancreatic necrosis (PN) is associated with increased mortality, and risk of infection. Minimally invasive

Table poster 6.

Cohort	I (2002-2004)	II (2008-2010)	P value
Acute pancreatitis (n)	372	364	
Pancreatic necrosis (n)	11	13	ns
Surgical drainage alone	3	4	ns
PD alone	0	5	< 0.05
ED alone	0	1	ns
Two or more approaches	8	3	< 0.05
Surgery alone or combined with PD or ED	11	7	< 0.05
Organ failure before drainage	6	1	< 0.05
Organ failure after drainage	3	1	ns

approaches --percutaneous drainage [PD] and/or endoscopic drainage [ED]-- have obtained better outcomes than open surgery in necrotizing pancreatitis.

Objectives: In order to determine whether some relevant changes have occurred in our approach, we compared data from two periods.

Methods: A prospective observational cohort study that included all patients admitted with acute pancreatitis was carried out between January 2002-December 2004 (Cohort I), and January 2008 - December 2010 (Cohort II). Acute pancreatitis and pancreatic necrosis were defined according to the revised Atlanta classification. Results: Infection of necrosis confirmed by FNA, or pain was the main indication for surgical or minimally invasive drainage. Hospital stay, number of CT scans, readmission rate, and mortality were similar in both groups.

Conclusions: In cohort II, a decrease in surgical procedures and an increase in PD have been observed. Drainage is currently performed earlier, before the establishment of organ failure.

7. COMPARATIVE EVALUATION OF ENDOSCOPIC ULTRASONOGRAPHY (EUS) AND MAGNETIC RESONANCE CHOLANGIOPANCREATOGRAPHY WITH SECRETINE (MRCP-S) IN THE ETIOLOGICAL DIAGNOSIS OF IDIOPATHIC ACUTE PANCREATITIS (IAP): PRELIMINARY ANALYSIS

F. Bolado^a, J.J. Vila^a, S. Goñi^a, F.J. Jiménez Medióroz^b, J.L. García Sanchotena^b, J.M. Urman^a, M. Garaigorta de Dios^a, E. Rubio^a and J. Zabalza^b

^aDepartment of Gastroenterology; ^bDepartment of Radiology, Complejo Hospitalario de Navarra, Pamplona, Spain.

Objectives: To compare USE and MRCP-s in patients with IAP.

Methods: A prospective double-blind study was carried out from February 2009 through May 2011. All patients with IAP were offered EUS and MRCP-s at least 4 weeks after admission. The results of both were analyzed and compared (χ^2).

Results: 21 cases of IAP were diagnosed. 6 patients rejected at least 1 technique. 15 patients (7 men, median of 64 years) underwent both techniques. EUS was diagnostic in 13 (86.7%) and MRCP-s in 6 (40%) $p = 0.21$. In the latter, EUS was also diagnostic. Neither EUS nor MRCP-s was diagnostic in 2 patients. EUS observed 8 cholelithiasis, 1 choledocholithiasis, 2 pancreas divisum, 2 chronic pancreatitis and 2 cystic neoplasms (1 malignized). 1 patient had 2 different diagnoses. MRCP-s diagnosed 1 choledocholithiasis (seen at EUS), 4 pancreas divisum (agreed in 2. EUS diagnosed cholelithiasis in the other 2), 1 chronic pancreatitis (seen at EUS) and 2 cystic neoplasms (seen at EUS). No cholelithiasis was diagnosed with this technique.

Conclusions: The analysis showed no statistically significant differences, although EUS was superior to MRCP-s in gallstone detection. The correlation between them was good for choledocholithiasis and cystic lesions. Most of the IAP are of biliary origin.

Table poster 8.

Morbidity risk stratification	0-0.2	0.2-0.4	0.4-0.6	0.6-0.8	0.8-1
Patients (n)	3	18	4	6	2
Predicted risk (mean)	0.16	0.30	0.49	0.67	0.90
Expected morbidity -E- (n)	0.5	5.5	2.0	4.0	1.8
Observed morbidity -O- (n)	1	9	3	4	2
Ratio O/E	2.06	1.65	1.53	1.00	1.11
Expected morbidity with added complications -AC- (n) *	1	12	4	5	2
Ratio O/E with AC *	2.06	2.20	2.05	1.25	1.11

8. ASSESSMENT OF SURGICAL RISK WITH POSSUM IN PANCREATIC SURGERY

J. Parra^a, M. Rey-Riveiro^a, R. Saeta^a, S. Carbonell^a, C. Villodre^a, E. de Madaria^a, A. Zarco^a, G. Rodríguez^a, P. Zapater^b, L. Mena^c and F. Lluís^a

^aUnidad de Patología Pancreática; ^bFarmacología Clínica; ^cUnidad de Admisión, Hospital General Universitario de Alicante, Spain.

Objectives: To determine the predictive value of POSSUM scoring system in major pancreatic surgery.

Methods: Over a two-year period, the expected surgical risk of 33 consecutive patients undergoing pancreatic resection (cephalic pancreato-duodenectomy, caudal pancreato-splenectomy) was calculated with POSSUM, and the 30-day postoperative observed morbi-mortality was recorded.

Results: In addition to established POSSUM morbidity, some observed complications --haemorrhoidal thrombosis (n = 1), gastric perforation (n = 1), morphine withdrawal syndrome (n = 1), seroma (n = 1), and pleural effusion (n = 1)-- modified analysis of results, whereas other complications --upper GI bleeding (n = 1), supraventricular tachycardia (n = 1), hypokalemia (n = 1)-- did not. Morbidity: Hosmer-Lemeshow (H-L) test = 5.28 ($p = 0.15$); (* with added complications): H-L test = 17.08 ($p = 0.0006$). Four patients died. Mortality: H-L test = 2.62 ($p = 0.45$).

Conclusions: POSSUM correctly predicts mortality and underestimates morbidity when added complications are considered in major pancreatic surgery.

9. UTILITY OF EUS GUIDED BRUSHING OF THE INNER LINING OF THE CYSTIC TUMORS OF THE PANCREAS

M.E. Polanía^a, J.R. Aparicio^a, A. Cabezas^b, J. Martínez^a, F. Ruiz^a and J.A. Casellas^a

^aEndoscopy Unit; ^bPathology Service, Hospital General Universitario de Alicante, Spain.

Introduction: The study and typification of the cystic tumors of the pancreas is still a clinical challenge. The EUS guided endoscopic access of these lesions is an important tool because of the retroperitoneal location of the pancreas and the difficult transabdominal access. The EUS guided FNA and recently the EUS guided brushing of the inner lining of the cystic lesion is improving the accuracy of this diagnostic technique.

Objectives: To assess the diagnostic yield of EUS guided inner lining brushing in cystic tumors of the pancreas.

Methods: A prospective study, enrolling patients that were referred to our unit with cystic tumors of the pancreas to practice EUS-FNA. It was made puncture of the cysts with needle 19G Echo Tip ultra (COOK), after it has been aspirated almost all the liquid we introduced through the needle a brush, EchoBrush(COOK) and brushed the inner lining of the cyst. The needle and the brush are withdrawn "on block" and two smears were made, the rest of the material was processed in Thin-prep.

Results: Number of patients 28, males 13 (46.4%). The mean age of the sample was 62.4 years SD 14.2. It was technically possible to introduce the needle and the brush in all the cases. The EchoBrush cytology was meaningful for diagnosis in 20 (71.4%) of all the cases. There was statistical significant difference between EchoBrush and FNA cytology for diagnosis, 71.4% vs 21.4% RD 0.5% CI 95% 0.241-0.674, $p = 0.0001$. Four patients undergone surgery, there was concordance between pathology and cytology diagnosis in three of them.

Conclusions: The EUS-guided inner lining brushing of the cystic tumors of the pancreas improves the diagnostic accuracy of the technique.

10. OUTCOMES FROM ENDOSCOPIC TREATMENT OF NON-TRAUMATIC WIRSUNG DISRUPTION

J.J. Vila, M. Gómez, F. Bolado, M. Basterra, M. Kutz, J. Urman, M. Garaigorta and E. Rubio

Department of Gastroenterology, Complejo Hospitalario de Navarra, Pamplona, Spain.

Objectives: To assess the results of therapy with pancreatic stenting in Wirsung disruption.

Methods: We included patients with Wirsung disruption treated with pancreatic stenting between January 2009 and June 2011. Variables: Type of pancreatic disease and treatment performed, technical and clinical success and outcome.

Results: Ten patients were included (4 with chronic pancreatitis and 5 with disruption after acute pancreatitis). ERCP indication: pseudocyst (7), pancreatic ascites (4) and pancreatic pleural effusion (1). Disruption location: head (2), isthmus (1); body (3) and tail (4). Partial/complete disruption: 7/3. The stent was introduced through major papilla in 7 and through minor in 3. In all cases, sphincterotomy was performed, 1 stent was placed in 9 cases and 2 in one. Stents caliber: 3 of 5F and 7 of 7F. Complications: 1 immediate hemorrhage after sphincterotomy (sclerosis), 2 infectious complications. Technical success was accomplished in 8 and clinical in 6 cases. Median clinical follow up was 13,4 months. Four stents replacements were necessary to one patient and 1 to 4 patients due to pancreatic stenosis. Three patients showed symptoms during follow up.

Conclusions: Treatment of Wirsung disruption with stents is feasible in 80% of cases and clinical resolution is achieved in 75%.

11. FLUID PRESCRIPTION BY GASTROENTEROLOGISTS VERSUS NON-GASTROENTEROLOGISTS AT EMERGENCY ROOM

N. Moya-Hoyo, I. López-Font, L. Sempere, G. Soler-Sala, F. Lluís, J. Martínez, M. Pérez-Mateo and E. de Madaria

Unidad de Patología Pancreática, Hospital General Universitario de Alicante, Spain.

Introduction: Most guidelines addressing the management of acute pancreatitis (AP) recommend aggressive fluid therapy although it is not an evidence-based statement. We hypothesized that gastroenterologists may be more aware of the benefits of a high fluid volume therapy in the first 24 hours of hospital admission.

Objectives: To compare the initial fluid volume prescribed for the first 24h by non-gastroenterologists (NGE) versus gastroenterologists (GE) at emergency room and whether it is associated with different outcome.

Methods: Retrospective study. We included every adult patient admitted in our Unit between December 2007 and March 2009 with the diagnosis of AP. We excluded patients under previous

hemodialysis. Initial fluid prescription was retrieved from medical records.

Results: We analyzed 144 episodes of AP. Seventeen (11.8%) patients had pancreatic necrosis, 5 (3.5%) had persistent organ failure and 2 (1.4%) patients died. Eighty-seven (60.4%) episodes were managed at emergency room by NGE and 57 (39.6%) by GE. The median (p75-p25) prescribed fluids was 3.3 (3.8-3)L. NGE prescribed 3.2 (3.5-2.7) versus 3.5 (3.9-3.3)L by GE, $p < 0.01$. Twenty-eight (32.2%) patients were planned to receive less than 3L (< p25) in the first 24h in the NGE group versus 7 (12.3%) in the GE group, $p < 0.01$. There was no difference in outcome (pancreatic necrosis, acute collections, persistent organ failure and mortality) between both groups.

Conclusions: Gastroenterologists prescribe higher fluid volume at hospital admission than non gastroenterologists, but the clinical relevance of this difference is uncertain.

12. MORPHOLOGIC AND FUNCTIONAL STUDY OF THE PANCREAS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS. PRELIMINARY DATA

A. Farré^a, C. Pérez^b, A. Pérez^c, M. Cortés^d, J.M. Monill^b, D. Hernández^b and C. Martínez^d

^aServicio de Patología Digestiva; ^bServicio de Radiología; ^cServicio de Endocrinología; ^dServicio de Bioquímica, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain.

Objectives: To assess morphologic and functional changes in the pancreas in patients with type 2 diabetes mellitus.

Methods: We performed a morphologic and functional study of the pancreas in 10 patients (6 females, 4 males; aged 47 to 76 years) who had type 2 diabetes mellitus but no history of pancreatic disease. Studies were carried out using Secretin-Magnetic Resonance Cholangiography (S-MRC) (Secrelux, Sanochemia, Germany) and fecal elastase measurement (ScheBo Tech, Germany).

Results: Using the Cambridge Classification of chronic pancreatitis (CP), 7 patients showed morphologic ductal alterations (3 grade I and 4 grade II). After administering IV secretin the patients were classified using a qualitative gradation pattern of pancreatic insufficiency, based on the degree of duodenal contrast replenishment (range 0 to 3; 0 = poor, 3 = normal). Two patients showed mild insufficiency (grade 2) and 8 patients showed a normal pattern (grade 3). Fecal elastase was abnormal in only one patient with a moderate ductal alteration (grade II) and a normal S-MRC.

Conclusions: Morphologic ductal alterations suggesting CP were observed in patients with type 2 diabetes mellitus.

13. CHOLEDOCHOLITHIASIS PREDICTIVE FACTORS DIAGNOSED BY MAGNETIC RESONANCE CHOLANGIOPANCREATOGRAPHY OR ENDOSCOPIC ULTRASONOGRAPHY IN ACUTE BILIARY PANCREATITIS

M.A. Romero Ordóñez^a, F. Fernández Cano^a, R. Rivera Irigoín^a, M. González Bárcenas^a, A. Pérez Aisa^a, A. Blázquez Puerta^a, F. Rivas Ruiz^b and A. Sánchez Cantos^a

^aDepartament of Gastroenterology; ^bInvestigation Unit, Hospital Costa del Sol, Marbella, Málaga, Spain.

Introduction: The temporary obstruction of the ampulla of Water due to lithiasis seems to be the triggering factor for Acute Biliary Pancreatitis (ABP). Most choledocolithiasis are self-limited (spontaneous expulsion to duodenum). Those ones that remain in the bile duct could condition the development of ABP and the need of specific therapeutic measures.

Objectives: To identify analytic and ultrasonographic predictive factors for choledocholithiasis by means of Magnetic Resonance Cholangiopancreatography (MRC) or Endoscopic Ultrasonography (EUS). To establish the best cut-off point for those parameters. To calculate the choledocholithiasis rate in ABP.

Methods: Descriptive-retrospective study in patients with ABP between 2008 and 2009 who had a MRC or EUS. A bivariate and ROC analysis of analytic parameters was made with significant differences, assessing the Area Under the Curve (AUC) (CI 95%) and selecting the best cut-off.

Results: We included 100 patients, 73 had undergone MRC (9 with choledocholithiasis [12.3%]) and 27 EUS (6 of them with choledocholithiasis [22.2%]). Among the choledocholithiasis group, the mean and median for GGT was 496 and 452 U/L whereas in the group without choledocholithiasis it was 246 and 220 U/L. For AP the mean and median for choledocholithiasis group were 226 and 248 U/L, and for the control group were 137 and 113 U/L. Total bilirubin was 3.16 and 1.9 mg/dl in the choledocholithiasis group, opposed to 1.51 and 0.9 mg/dl in the other group, whereas for direct bilirubin the mean and median in the choledocholithiasis group was 3.17 and 3 mg/dl versus 1.52 and 1.2 mg/dl in the second group. Statistical significance was reached in all of these cases. When the diameter of the common bile duct was higher than 7 mm together with dilatation of the intrahepatic bile ducts the probability of choledocholithiasis was high. The best parameter to predict choledocholithiasis was GGT with an AUC of 0.817 followed by direct bilirubin with 0.809 and AP (AUC 0.768).

Conclusions: The choledocholithiasis rate in our series (15%) is similar to the ones previously described. The GGT levels are the ones which better predict the presence of choledocholithiasis when a cut-off point of 310.5 U/L is taken (Normal values: 7-50 U/L).

14. ASSESSMENT OF SECONDARY PANCREATIC EXOCRINE INSUFFICIENCY IN GASTRECTOMIZED POPULATION

F. Fernández Cano^a, A. Pérez Aisa^a, I.M. Mendéz Sánchez^a, J.M. Rosales Zabal^a, R. Rivera Irigoin^a, J. Alcaide^b, A.M. Sánchez Cantos^a and J.M. Navarro Jarabo^a

^aDigestive Unit; ^bClinical Oncology Unit, Agencia Sanitaria Costa del Sol, Marbella, Málaga, Spain.

Introduction: Stomach surgical resection modifies the gastric hormonal regulation system and redesigns the gastrointestinal transit. The 13Carbon mixed triglyceride breath test has previously proven a high sensitivity and specificity. The nutritional status in such patients could be conditioned by fat maldigestion in the absence of small intestinal bacterial overgrowth (SIBO).

Objectives: To determine the frequency of SIBO and Pancreatic Exocrine Insufficiency (PEI) in gastrectomized population. To assess the nutritional status of our patients.

Methods: Transversal study including patients with total or subtotal gastrectomy because of neoplastic or benign pathology. Nutritional and clinical parameters were evaluated in patients with SIBO and PEI, demonstrating SIBO by glucose H2 breath test and fat maldigestion with the use of the 13carbon mixed triglyceride breath test.

Results: 17 patients were included (52.9% men) with a mean age of 64 years (\pm 12.4). 94.1% had neoplastic pathology, 88.2% Roux-en-Y gastric bypass reconstruction and 11.8% Billroth II reconstruction. SIBO was positive in 47.1% of patients. After treatment, 37.5% was negative. Of the 12 patients evaluated with 13C mixed triglycerides BT, 17.6% had PEI and did not associated any predisposal factor. Only 33% of PEI had slight malnutrition. Of patients without PEI, 60% had a normal nutritional status and 30% slight malnutrition.

Conclusions: In our gastrectomized patients, the prevalence of SIBO is 47.1%. Fat maldigestion (probably because of PEI) is present in 17.6% of our patients. There are no nutritional differences between patients with or without PEI.

15. PANCREATIC PSEUDOCYST INFECTION

N. Irazabal^a, M. Álvarez^a, A. Orive^b, L. Martín^a, M. Escalante^a, I. Gorroño^a, M. Ogueta^a, S. Romero^a, C. Molina^a, A. Hernández^a, S. Martín^a and L. Eraña^a

^aDepartment of Gastroenterology, HUA-Santiago, Vitoria, Spain.

^bDepartment of Gastroenterology, Hospital Galdakao-Usansolo, Galdakao, Spain.

Introduction: Infection is the commonest complication of pancreatic pseudocyst. Whereas enterobacteria are microorganisms usually isolated, fungi are rare.

Objectives: The aim of this report was to analyse and describe the microbiology of pancreatic pseudocysts aspirate, drained by endoscopic ultrasound, in patients with severe acute necrohemorrhagic pancreatitis.

Methods: Prospective descriptive work carried out in our hospital from July 2008 to June 2011. During the echoendoscopic drainage, cyst fluid was aspirated and sent for microbiologic analysis.

Results: Eight patients (four male and four female) with mean age of 66 years. In 6 cultures one microorganism was isolated (*Citrobacter freundii*, *E. coli*, *Enterococcus casseliflavus*, *Candida torula glabrata* and *P. aeruginosa*) while the other two were polymicrobial (*Klebsiella* spp, *E. cloacae*, *Klebsiella oxytoca* and *Enterococcus faecium*, and *Staphylococcus* spp and *Pasteurella multocida*). 87.5% of the gram negative bacteria were sensitive to quinolones and carbapenem. Among the gram positives, the enterococcus required broad-spectrum antibiotics due to their limited antibiogram.

Conclusions: The cultures are mainly monomicrobial (75%). It should be emphasized the presence of rarely described microorganisms. Most of the microorganisms, except the enterococcus, were sensitive to regular antibiotics.

16. SOLID PSEUDOPAPILLARY NEOPLASM OF THE PANCREAS. REPORT OF SIX CASES

S. Navarro^a, J. Ferrer^b, J.A. Bombí^c, M.A. López-Boado^b, J.R. Ayuso^d, A. Ginés^e, G. Fernández-Esparrach^e, E. Vaquero^a, M. Cuatrecasas^c and L. Fernández-Cruz^b

^aServicio de Gastroenterología; ^bServicio de Cirugía, Institut de Malalties Digestives i Metabòliques; ^cServicio de Anatomía Patológica; ^dServicio de Radiología; ^eSección de Endoscopia, Hospital Clínic, Universidad de Barcelona, IDIBAPS, CIBEREHD, Barcelona, Spain.

Introduction and objectives: Solid pseudopapillary neoplasms (SPNs) are rare tumours of the exocrine pancreas. Although they can develop metastasis the prognosis is good. The aim of this study was to describe the characteristics of these tumours attended in our hospital.

Methods: All cases of SPN in database of Pathology Department between 1991 and 2010 were included. Age, gender, symptoms, type of surgery, pathologic and immunohistochemical characteristics, and clinical evolution were analyzed.

Results: Six cases were identified; all of them were women with a median age of 27.5 years. One patient presented haemoperitoneum, two abdominal pain and three were diagnosed incidentally. The most frequent localization was in the pancreatic tail (n = 4) and

median size was 7.7 cm. Four tumours were benign and two carcinomas. One of them had liver and lymph node metastases. Ki-67 proliferation index was low (1-3%). After a median follow-up of 33.5 months all patients were alive and without evidence of relapse.

Conclusions: SPNs occur in young women. In most cases surgical resection is curative. A low mitotic index gives a good prognosis and a long survival.

17. PANCREATITIS, POLYARTHRITIS, PANNICULITIS SYNDROME (PPP SYNDROME) SUCCESSFULLY TREATED WITH SURGERY

M.A. Mises, I. Moraleja, M.A. Bautista, L.A. Herrera, F. Casafont and G. de las Heras Castaño

Hospital Universitario Marqués de Valdecilla, Santander, Spain.

Objectives: To report an uncommon case of PPP syndrome and to discuss the possible pathogenesis and treatment options.

Methods: A male patient with previously known chronic alcoholic pancreatitis was admitted with severe polyarthritis that left him unable to walk and multiple subcutaneous nodules in different locations, without abdominal pain. CT scan showed a cystic lesion in the pancreatic isthmus. A doppler signal adjacent to the cystic lesion was detected by EUS, not allowing its endoscopic drainage.

Results: Resolution of cutaneous and osteoarticular symptoms after surgery.

Conclusions: PPP syndrome is a rare entity, with less than 30 reported cases in the literature. We discussed the diagnosis, possible pathogenesis and treatment options.

18. MANAGEMENT OF LOCAL COMPLICATIONS IN SEVERE ACUTE PANCREATITIS

F. Fernández Cano^a, M.A. Romero Ordóñez^a, R. Rivera Irigoín^a, M. González Bárcenas^a, A. Blázquez Puerta^a, A. Pérez Aisa^a, F. Rivas Ruiz^b and A. Sánchez Cantos^a

^aDepartamento of Gastroenterology; ^bInvestigation Unit, Hospital Costa del Sol, Marbella, Málaga, Spain.

Introduction: In acute pancreatitis the local complications determine an increase of morbidity and mortality. The management of these complications have experienced several changes in the last years.

Objectives: To describe characteristics in severe acute pancreatitis, especially local complications and their management.

Methods: Descriptive retrospective study of patients admitted in hospital with acute pancreatitis and local complications between 2008 and 2009.

Results: 46 patients were included (among 283 acute pancreatitis admitted: 16.25%), with a median age of 57.3 years. Median stay in hospital was 15.5 days. 17.4% (8 patients) were admitted in the Intensive Care Unit. Etiology of pancreatitis was: Biliary 20 (20/143), Alcohol 20 (20/73), Unknown 5 (5/33), Others 1 (1/29). The local complications were: 25 Liquid collections (54.3%), 19 Pseudocysts (41.3%), 4 Abscesses (8.7%), 19 necrosis (41.3%), 4 infected necrosis (8.7%). Endoscopic cystogastrostomy was performed in 6 patients, one Cystoduodenostomy. 2 patients received a transpapillary and transmural drainage. A percutaneous drainage was performed in one patient. 4 patients needed surgery (3 necrosectomies and 1 cystoenterostomy), the rest of the patients were handled in a conservative way. Global mortality was 15.2% (7 patients, 6 of them related to acute pancreatitis).

Conclusions: The management of liquid collections/pseudocysts/abscesses included mainly transmural/transpapillary endoscopic drainage. The mortality rate is similar to previously described.

19. EFFICACY AND COMPLICATIONS OF PROLONGED ENDOSCOPIC DRAINAGE OF PANCREATIC PSEUDOCYSTS

N. Moya-Hoyo, J.R. Aparicio, J. Martínez, F. Ruiz and J.A. Casellas

Endoscopy Unit, Hospital General Universitario de Alicante, Spain.

Introduction: The best moment to remove adrainage from a pancreatic pseudocyst is not well defined. Also, there is no evidence regarding whether a longer interval of drainage leads to an increase in complications.

Objectives: To assess the efficacy and safety of prolonged drainage of pancreatic pseudocysts

Methods: Retrospective study. We included patients > 18 years with endoscopically drained pancreatic pseudocysts after acute or chronic pancreatitis in our Unit between October 2008 and February 2011. All the pseudocysts were treated with one or several plastic or metallic stents.

Results: Fifteen patients were included. Technical success was achieved in 12 (80%), complete clinical success in 10 (66.7%) and partial clinical success in 2 (13.3%). Three patients developed complications: 1 early complication (pneumoperitoneum) and 2 late complications (gastrointestinal bleeding and infection). There were no deaths. In the follow up, the mean interval of drainage was 213 (SD 126.9). There was only one relapse after removing the stents.

Conclusions: Endoscopic drainage of pancreatic pseudocysts is a useful technique. A prolonged drainage is not associated with increased incidence of complications.

20. MANAGEMENT EVALUATION OF PANCREATIC PSEUDOCYSTS IN ACUTE PANCREATITIS

R. Cuesta-Cortijo, M.D. Picó-Sala, I. Pascual-Sánchez, C. Grau-García, M.F. García-Sepulcre, J. Sola-Vera, E. Girona-Torres, E. Pérez-Rabasco and C. Sillero-García

Gastroenterology Unit, University General Hospital of Elche, Alicante, Spain.

Objectives: To assess the characteristics and evolution of patients with pseudocysts.

Methods: Retrospective study of patients with acute pancreatitis hospitalized in 2010 in our center.

Results: We included 112 patients, 12% developed pseudocysts. Pseudocysts were managed as it follows: 46% conservative treatment; 8% percutaneous drainage, 8% surgical drainage; and 38%, both of them. The patients with pseudocysts had a higher hospital stay (40 vs 7 days, $p < 0.0001$), more frequent development of organ failure (31% vs 3%, $p < 0.0005$) and more mortality (15.4% vs 1%, $p = 0.003$). The hospital stay for patients requiring conservative treatment was significantly lower, compared to surgical drainage, percutaneous drainage or both of them (22 vs 85 days, $p = 0.007$); no differences were observed when comparing the different drainage techniques. No patient treated conservatively presented organ failure compared to the 100% of patients treated with surgery or the 60% of patients who required drainage and then surgery ($p = 0.019$).

Conclusions: The presence of pseudocysts is associated with more days of hospitalization, organ failure, and mortality. Patients treated conservatively have less hospital stay and organ failure.

21. COMPLICATED ENDOSCOPIC MANAGEMENT OF A PATIENT WITH PANCREATIC ASCITES, PSEUDOCYST AND PANCREATOLITHIASIS: STENT INTERNAL MIGRATION

J.J. Vila Costas, F. Bolado Concejo, M. Kutz Leoz, M. Basterra Ederri, M. Gómez Alonso and J. Urman Fernández

Department of Gastroenterology, Complejo Hospitalario de Navarra, Pamplona, Spain.

Case report: A patient with chronic pancreatitis was admitted with abdominal pain and semiology of ascites. Serum Amilase was 1,649 U/L. A CT-scan revealed ascites and pancreatic pseudocysts. Ascitic fluid amylase was 7,479 U/L. A ERCP revealed a stenosis which avoided cannulating of the major papilla. Minor papilla was cannulated, we found ductal lithiasis which was removed. The pancreatic duct was communicated with a pseudocyst. Sphincterotomy and a 7 F and 13 cm stent was introduced. The patient followed a good clinical evolution, with pain and ascites resolution. An ERCP was performed 2 months later showing stent internal migration across the minor papilla. We were unable to remove it. A 2nd stent was placed in parallel. An ERCP performed 2 weeks later showed internal migration of the 2nd stent. Stents removal was achieved by bending them over themselves from their caudal end. In view of traumatic endoscopy, a metallic stent was placed across the minor papilla. Two weeks later it was removed checking ductal permeability.

Discussion: Endoscopic treatment of pancreatic ascites is possible in 81% of cases, resolutive in 45%. Therapy by the minor is not easy and has a high risk of complication (50%). Pacreatic stents internal migration in 5%. Endoscopic removal is possible in 80% with 13% complications. Gathering of these conditions is exceptional.

22. RECURRENT ACUTE PANCREATITIS IN A HIV/HBV COINFECTED PATIENT

F. Bolado Concejo^a, J.J. Vila Costas^a, J. Urman Fernández^a, A. Tarifa Castilla^b, C. Zazpe Ripa^b and J. Herrera Cabezon^b

^aDepartment of Gastroenterology; ^bDepartment of Surgery, Complejo Hospitalario de Navarra, Pamplona, Spain.

A 62-year-old male coinfectd with HBV and HIV (undetectable viral load). In a period of 2 months He suffered over a 2 month period from 2 episodes of acute pancreatitis (AP). Laboratory findings suggested biliary cause. Ultrasonography showed cholelithiasis and a normal biliary tract. A computed tomography (CT) and a magnetic resonance (MR) cholangio-pancreatography were also performed, both without pathological findings. He was referred to surgery with the diagnosis of mild biliary pancreatitis and a laparoscopic cholecystectomy was performed. 6 weeks later he came back with a third episode of AP. Ultrasonography showed a 3 cm nodule located in right lobe of liver with non-specific pattern in multislice CT and MR. It was biopsied with the result of hepatocellular carcinoma (HCC). Alfa-fetoprotein: 18.8 ng/dl (normal < 8.1). Portal hypertension was ruled out and surgical treatment was chosen. In the next two months he suffered two other AP episodes, which were as previously suggestive of biliary origin. Because of this an endoscopic retrograde cholangiopancreatography was performed. Cholangiography was normal but clots coming out the papilla were observed, without apparent bleeding during sphincterotomy. This fact made us think of a possible fistula connecting the tumour and the biliary tree. 5 days later the patient was operated. A 4.5 cm tumour located in segment VII was removed. Its portal pedicle was occupied by villous tissue. The pathological analysis confirmed the presence of fragments of HCC in the biliary tree. AP is an infrequent complication

of HCC. In our case, the diagnosis of HCC was performed after the episode of acute pancreatitis.

23. CASE REPORT: AUTOIMMUNE HEPATITIS AND PANCREATITIS ASSOCIATED WITH IGG4 MEDIATED SCLEROSING CHOLANGITIS

V. Andreu^a, A. Perelló^a, N. Chahri^a, E.M. Merino^b, T. Serrano^c and M. Barenys^a

^aHospital de Viladecans, Barcelona, Spain. ^bInstitut de Diagnòstic per la Imatge (IDI), Hospital Universitari de Bellvitge, Barcelona, Spain. ^cHospital Universitari de Bellvitge, Barcelona, Spain.

Introduction: We report a patient with autoimmune hepatitis and pancreatitis associated with IgG4 mediated sclerosing cholangitis with favorable outcome with immunosuppressive therapy.

Case report: A 35 year old woman who complained of nausea, jaundice, itching and weight loss of 13 kg in 6 months was admitted to the hospital. Physical examination disclosed deep jaundice and scratching skin lesions, being the rest within normal. The lab works noted: anemia and AST 255 U/L, ALT 133 U/L, GGT 227 U/L, alkaline phosphatase of 239 U/L, bilirubin 15.4 mg/dl (conjugated 14.7 mg/dl) with normal clotting. Further studies showed IgG 20.27 g/L, ANA 1/640 and SMA 1/40. The rest of autoantibodies, and viral studies were negative. CT scan and a cholangio-MNR showed an enlarged pancreas with involvement of the intra- and extrahepatic bile duct. Biopsy confirmed an autoimmune hepatitis. Immunosuppressive therapy was initiated with marked clinical, analytical and radiological improvement.

Discussion: Autoimmune pancreatitis may have a remarkably variable clinical expression. The cholangio-MNR is an efficient and essential tool for the diagnosis. The laboratory tests may be helpful. However, diagnosis can only be confirmed by clinical improvement after initiation of treatment.

24. TORASEMIDE AND ACUTE PANCREATITIS: A CAUSAL ASSOCIATION?

R. Cuesta-Cortijo, I. Pascual-Sánchez, C. Grau-García, M.D. Picó-Sala, J. Sola-Vera, E. Pérez-Rabasco, E. Girona-Torres and C. Sillero-García

Gastroenterology Unit, University General Hospital of Elche, Alicante, Spain.

Objectives: Report a case of acute pancreatitis (AP) in a patient treated with Torasemide.

Case report: 87-year-old man, with hypertension, who was hospitalized because of a severe AP, treated with Torasemide (5 mg/day) from 1 month before admission. We excluded other causes of AP.

Discussion: According to the FDA, among 4,876 people who had side effects after the administration of Torasemide, 25 of them (0.51%) suffered PA. In our case there was a long period between the introduction of the drug and the onset of symptoms. If the toxic etiology and the hypersensitivity reaction are both removed, it suggests a metabolic effect. Animal studies have shown that Furosemide and other loop diuretics increase the pancreatic secretion of water and bicarbonate. This produces hyperosmolarity and hyperviscosity of pancreatic juice. It has been postulated that this hyperviscosity leads to proteins' precipitation in the pancreatic ducts. When the latency period in the AP induced by Torasemide is long, it may be a metabolic effect, with increased secretion of water and bicarbonate, leading to hyperviscosity of pancreatic juice, tubular lock and AP.

25. CHRONIC PANCREATITIS OR INTRADUCTAL PAPILLARY MUCINOUS NEOPLASM (IPMN)? A CASE REPORT

C. Ortega^a, P. Griñó^b, R. Laveda^b, A. Martínez^b, G. García^b, J. Sánchez^b and M. Coronas^b

^aRadiation Oncology Department; ^bGastroenterology Department, Hospital Universitari Sant Joan d'Alacant, Spain.

Introduction: The aim of this report is to highlight the importance of differential diagnosis between IPMN and chronic pancreatitis, when aetiology is unclear.

Case report: A 77 years old woman epigastralgia lasting 2 months, with a medical history of DM type 2, breast cancer, severe acute pancreatitis and cholecystectomy in 1999. It was followed by surgery until 2009, and she was diagnosed as having Chronic pancreatitis due to dilation of intrahepatic and extrahepatic bile duct, pancreatic calcifications, ductal ectasia and Wirsung dilation at the level of head and body. At the moment of admission, she showed a high blood Ca 19.9 (> 5,000) and MRI revealed the presence of mass in the body of the pancreas, suggestive of pancreatic carcinoma. This diagnosis of adenocarcinoma on pre-existing IPMN was confirmed by means of endoscopic ultrasonography (EUS) with FNA.

Discussion: This case shows that both pathologies, Chronic pancreatitis and IPMN, share at the beginning the dilation of pancreatic duct. IPMN may be confounded with Chronic pancreatitis, with subsequent delay of curative approach. Finally, it is important to dismiss neoplastic signs by means of (EUS for their detection at early stages, preventing their progression to advanced stages.

26. WHICH FACTORS ARE ASSOCIATED WITH INTOLERANCE TO ORAL DIET REINTRODUCTION IN MILD ACUTE PANCREATITIS?

M. Francisco^a, F. Valentin^a, J. Cubiella^a, M.T. Alves^b, M.J. García^b, T. Fernández^c and J. Fernández-Seara^a

^aDepartments of Gastroenterology; ^bResearch Support Unit; ^cNutrition Unit, Complexo Hospitalario de Ourense, Spain.

Introduction: In mild acute pancreatitis (AP) the way to reintroduce oral feeding is not well defined.

Objectives and methods: To describe the oral diet reintroduction in a cohort of patients with mild AP, the frequency of intolerance and the associated factors. An observational, descriptive, retrospective and cross-sectional study was design. We included patients with mild AP who required admission between January 2007 and December 2009. Severe, recurrent or in-hospital AP was excluded. We analyzed demographic data, etiology, variables on admission, treatment within first 48 hours, fasting time and oral diet reintroduction, the intolerance to oral diet and its treatment. We determined the variables associated to intolerance using a Cox proportional hazards model.

Results: We identified 303 AP in 252 patients, 71 of them with exclusion criteria. The mean age was 68.26 ± 17.67 years, 52.6% male. The BISAP score was 1.26 ± 0.96 . The etiology was biliary (64.7%), alcohol (10.8%), dyslipidemia (2.6%) and idiopathic (19%). Fasting time was 2.84 ± 1.66 days, and diet was reintroduced progressively in 90.9% of the patients. 28 (12.1%) patients developed intolerance to oral diet with a mean time of 1.75 ± 2.77 days. Oral diet was reduced or suspended in 71.4% of patients. Analgesia and antiemetics were required in 64% and 35.7% of the patients respectively. The variables associated to intolerance in the univariate analysis were hematocrit ($p = 0.026$) and pleural effusion ($p = 0.036$) on admission, hematocrit ($p = 0.005$), serum calcium ($p = 0.038$) and the requirements of metamizol in the first 48 hours ($p = 0.053$), method of reintroduction of diet ($p = 0.047$) and diagnosis of choledocholithiasis ($p = 0.016$). Finally, hematocrit (HR 0.92, 95% CI 0.87 to 0.98, $p = 0.016$) and pleural effusion on admission (HR 2.34, 95% CI 1.03-5.33, $p = 0.043$), metamizol requirements within first 48 hours (HR 1.20, 95% CI 1.04 - 1.36, $p = 0.01$) and choledocholithiasis (HR 5.86, 95% CI 1.79-19.15, $p = 0.003$) were independently associated with intolerance to oral diet.

Conclusions: The intolerance to oral diet reintroduction is a rare event. The variables independently associated with intolerance were hematocrit and pleural effusion on admission, metamizol requirements during the first 48 hours and choledocholithiasis.