

0191.**Outcomes of acute pancreatitis patients over the last decade: Single tertiary-center experience**

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Introduction: Acute pancreatitis management remains mainly supportive and can be challenging in patients.

Aim: Our study aims to describe a 10 years tertiary-center experience in management of acute pancreatitis.

Method: Clinical management and outcomes of 300 prospectively enrolled acute pancreatitis patients stratified by the Revised Atlanta Classification were analyzed; trends in management between early (2006-2010) and late enrollment phase (2011-2015) were assessed.

Results: 62 % of patients were classified as mild acute pancreatitis; moderately severe and severe grades contained 23.5% and 14.5% of participants. IV administration during the first 24 hours (mild acute pancreatitis 3.7, moderately severe acute pancreatitis 4.7, and severe acute pancreatitis 4.8 L), need for ICU (6%, 13%, 63%), and nutritional support (18%, 70%, 95%) increased significantly with greater acute pancreatitis severity ($p < 0.001$). 57 (19%) patients developed necrotizing pancreatitis, of which 70% received prophylactic antibiotics, and 21% underwent pancreatic drainage/debridement. Prophylactic antibiotics (95% vs. 70%) and interventions (63% vs. 27%) were noted more frequently in severe acute pancreatitis than moderately severe acute pancreatitis ($p < 0.001$). Minimally invasive pancreatic interventions (19% vs. 41%) were more commonly used in the late phase ($p < 0.05$). The overall median length of hospitalization was 11 days reaching 29 days in severe acute pancreatitis group. Mortality was 2%; all deaths occurred in severe acute pancreatitis group.

Conclusion: This study shows an extensive report on outcome of acute pancreatitis and its trends overtime. Intervention treatment is required in less than 50% of patients with necrotizing pancreatitis. Utilization of enteral nutrition and minimally invasive pancreatic interventions has been increasing over time.

0193.**Amylase value in drains after pancreatoduodenectomy as predictive factor of postoperative pancreatic fistula**Guillermo Coayla¹, Cesar Rodriguez¹, Javier Targarona², Juan Carlos Marcos¹, Rocío Hernandez¹, Jose Quijano¹, Luis Rivero¹, Luis Barreda¹¹Hospital Nacional Edgardo Rebagliati Martins, Peru²Clinica Delgado, Peru

Introduction: Pancreatic fistula is a major and frequent complication in patients who underwent cephalic pancreatoduodenectomy; early detection is very important to follow and predict results for surgery.

Aim: The purpose of this study was to determine if amylase value in drains after cephalic pancreatoduodenectomy, is a predictive value to find the presence of clinically relevant pancreatic fistula (CRPF).

Method: We conducted a prospective and transversal study. There where included patients who underwent cephalic pancreatoduodenectomy, since April 2016 until April 2017. From the Pancreatic Surgery Service at Edgardo Rebagliati Hospital from Lima, Perú. Were obtained amylase value in drains at 1st, 3rd and 5th postoperative days. The definition used for pancreatic fistula was based on the International Study Group for Pancreatic Fistula (ISGPF).

Results: The study included 56 patients. we found clinically relevant pancreatic fistula (grade B and C) in 12%. The area under the receiver operating characteristic (ROC) curve from amylase value in drains at 3th and 5th days was 0.87; 95% IC [0.85 – 1.0] and 0.92; 95% IC % [0.76 – 0.99] respectively. Determine point break on amylase value on 3rd postoperative day up to 1010U/L with 83% sensibility and 85% specificity and likelihood

ratio (LR) (+) 5.6; LR (-) 0.2. Point break on 5th postoperative day up to 538 U/L with 86% sensibility and 91% specificity and LR (+) 9.21; LR (-) 0.16.

Conclusion: Amylase value in drains after pancreatoduodenectomy on 3rd and 5th posoperative days can predict the presence of clinically relevant pancreatic fistula in our institution.

0194.**Pancreatic enzyme replacement therapy in patients with pancreatic exocrine insufficiency**Mila Kovacheva-Slavova¹, Sylvie Siminkovitch¹, Jordan Genov¹, Branimir Golemanov¹, Romyana Mitova¹, Plamen Gecov², Dobrin Svinarov³, Borislav Vladimirov¹¹University Hospital Tsaritsa Ioanna-Isul, Department of Gastroenterology, Bulgaria²University Hospital Tsaritsa Ioanna-Isul, Department of Medical Imaging, Bulgaria³Central Laboratory of Therapeutic Drug Management and Clinical Pharmacology, Alexandrovska Hospital, Bulgaria

Introduction: Malnutrition is a typical complication of pancreatic diseases. Pancreatic enzyme replacement therapy (PERT) is a present standard in treating pancreatic exocrine insufficiency (PEI) independently of its aetiology. Clinical and nutritional status reassessment ensures an optimal therapeutic effect.

Aim: To monitor 100 patients (mean age 50,16±13,72, 59-males) with PEI due to pancreatic disorders.

Method: We investigated 63 patients with chronic pancreatitis (CP), 17 with acute pancreatitis (AP), 20 with pancreatic cancer/ pancreatic resection. All patients received PERT in doses based on PEI severity. 44 patients were followed-up 6 months after optimization suboptimal PERT. Nutritional status was evaluated by prealbumin, retinol binding protein (RBP), fat-soluble vitamins A, D, E; magnesium and BMI in addition to routine biochemical markers; imaging morphological data by Cambridge classification for CT/MRCP (grade I-IV). Statistical analysis was performed via SPSS v22.

Results: Suboptimal PERT with nutritional deficiencies in asymptomatic patients was observed within all patients groups. Protein malnutrition with prealbumin (mean:0,227±0,118g/L) and RBP (mean:0,0399±0,028g/L) below reference limits was observed in 40% and 39% of all patients. They correlated significantly to magnesium, hemoglobin, albumin, BMI and structural changes ($p < 0,05$) with lowest levels in patients with pancreatic cancer/resection. We found fat-soluble vitamin A, E, D deficiency/ insufficiency in 4,68%/31,25%, 38,5%/28,2% and 43,75% of the patients, respectively. During second follow-up we demonstrated clinical improvement with a significant increase in BMI, prealbumin, vitamins A, E, D, hemoglobin and albumin, $p < 0.01$.

Conclusion: Proper follow-up and correction of suboptimal PERT reduce the risk of severe malnutrition complications, associated morbidity and mortality and ensures better quality of life for patients with PEI.

0196.**Exocrine pancreatic insufficiency in pediatric associated to PRSS1 gene mutation: A case report in Colombia**Silvana Dadan¹, Wilson Daza¹, Michelle Higuera¹, Andrea Jimenez²¹Gastroenterology, Hepatology and Pediatric Nutrition Center - Gastronutriped, Colombia²University El Bosque, Colombia

Introduction: Hereditary pancreatitis (HP) is characterized by recurrent episodes of acute pancreatitis causing exocrine pancreatic insufficiency (EPI). The genetic mutations implicated in HP are: PRSS1, SPINK1, CFTR, and CTFR.

Aim: To describe a pediatric case of EPI associated to PRSS1 gene mutation.

Method: Clinical case.

Results: 3-year old female without a family history of HP, presenting abdominal pain during 4 months associate to severe abdominal distention, meteorism, and malnutrition. In abdominal X-rays, abundant fecal material was evident, was indicated treatment for constipation, without success. The symptoms persisted, as well as a great negative effect on the weight. Treatment was indicated for bacterial overgrowth, as well as a lactose, sucrose and fructose restricted diet, without improvement. Severe EPI was confirmed with very low pancreatic elastase-1 (PE-1), 45 mcg/g. Celiac disease, tumors and Zollinger-Ellison were investigated. Negative CFTR genetic sequencing. Genetic sequencing for Chronic Pancreatitis reporting PRSS1 gene mutation: c.86 A>T. Enzyme replacement, liposoluble vitamins, zinc, calcium, and nutritional management were initiated. Adequate evolution with improvement of abdominal distention and nutritional recovery.

Discussion: First case of EPI associated to PRSS1 gene mutation in Colombia. PRSS1 codify for trypsinogen and its mutation increases the conversion of trypsinogen to trypsin, generating pancreatic autolysis. The clinical manifestations appear before 5 years of age. It is associated with a greater risk of cancer in adulthood. It is autosomal dominant but cases have been reported without a family history, as in the present case.

Conclusion: PE-1 is useful for determining EPI and genetic sequencing is necessary for determining the gene mutations involved in HP.

0197.

Histological differences of intrapancreatic neural system among ordinary chronic pancreatitis and autoimmune pancreatitis type 1 and type 2

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Introduction: The prevalence of pain complaint varies among ordinary chronic pancreatitis (CP) and autoimmune pancreatitis (AIP) type1 and type2.

Aim: The aim of this study is to histologically evaluate intrapancreatic neural structure in these three types of pancreatitis.

Method: Pancreatic tissue samples were collected from 37 patients who had underwent surgical resection (16 patients with CP, 11 with type 1 AIP, and 10 with type 2 AIP). Intrapancreatic nerves in tissue sections were evaluated by immunohistochemical staining with gene product 9.5 (PGP9.5), the pan-neuronal marker protein. Furthermore, the expression of nerve growth factor (NGF), and a high affinity receptor for NGF, tyrosine kinase receptor A (TrkA), was assessed by immunohistochemistry. The severity of intrapancreatic inflammation was evaluated by a previously reported scoring system.

Results: Neural density in CP was closely correlated with inflammation score, whereas there was no significant correlation between these parameters in type 1 and type 2 AIP. When CP was divided into mild CP and severe CP based on inflammation score, neural density in severe CP (0.169/mm²) was significantly increased compared to that of mild CP (0.035/mm²), type 1 AIP (0.071/mm²), type 2 AIP (0.076/mm²). Intrapancreatic nerves in type 2 AIP tended to be thicker than that in type 1 AIP, although neural density in two types of AIP was equivalent. NGF expression was stronger in type 1 AIP than in CP, whereas TrkA expression in type 1 AIP was poorer than in CP.

Conclusion: Although CP, type 1 AIP, and type 2 AIP share similarity in histologically sustaining pancreatic inflammation, intrapancreatic neural system appear to be different among three types of pancreatitis.

0202.

The influence of autonomic denervation on pancreatic function in a metabolic syndrome experimental design

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Introduction: The pancreatic gland, through the exocrine-endocrine axis participates in the digestive process and glucose homeostasis. Environmental factors and lifestyle changes lead to an Autonomic Nervous System unbalance which develops insulin resistance (IR), a feature of Metabolic Syndrome (MS, ATP-III). Acetylcholinesterase (ChAT) is an enzyme that can be a useful indicator of the enhancement of the cholinergic tone in the pancreas and liver, which puts in evidence the release of the Hepatic Insulin Sensitizing Substance (HISS), a putative hormone that acts synergically among with insulin in several tissues diminishing IR.

Aim: Enhance IR by interrupting the vagal-central-splanchnic circuit (Splanchnicectomy) in an experimental design of MS

Method: Male Sprague Dawley rats (n=12), divided in: Sham (Sh, n=6) and splanchicectomy (Sp, n=6). MS was induced by fructose 10% W/V, drinking water 20 weeks. Periodically weighed. We performed (under sodium thiopental anesthesia) Oral Glucose Tolerance Test (OGTT): basal, 30 and 60 minutes. We determined glucose (Glu), insuline (Ins), Amilase (Amy), Lipase (Lip), internationally recommended methods, HOMA index. An autopsy was performed and from pancreatic and hepatic tissue a histological sample was prepared for immunohistochemistry: ChAT was evidenced.

Results: Comparing Sp to Sh, we observed the following significant changes:

Conclusion: Splanchnicectomy compensated the effects that fructose should have caused. It modulates a sympathetic brake of the vago-vagal reflex, inducing and enhanced parasympathetic discharge by the vagal nuclei and, as a result, it enhances the intra hepatic cholinergic tone. The HISS factor released into the bloodstream stimulates glucose uptake and it's availability on various tissues, regulates IR by improving the exocrine/endocrine pancreas physiopathological response, and ultimately ameliorates MS. We believe this could be a useful therapeutical strategy as an alternative for bariatric surgery in humans.

0203.

Preliminary study on the efficacy of conversion surgery following intensive chemotherapy for initially unresectable pancreatic cancer

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Introduction: Surgery is the only way to cure pancreatic cancer (PC). Although the prognosis of unresectable pancreatic cancer (URPC) is extremely poor, recent advances in chemotherapy have improved the survival of patients with URPC. We herein report the results of a preliminary study on adjuvant surgery combined with intensive chemotherapy for URPC.

Method: Patients: The diagnosis and staging of PCs were made based on imaging studies including contrast-enhanced CT, MRI, and PET-CT. The URPC was defined by the presence of wide spread of a tumor to the major blood vessels or distant metastasis.