

on the amount of newly included patients per hospital is received from the third party.

Results: From November 2019 until March 2023 a total of 659 patients was included in the PSP. In the beginning of 2020 four hospitals started to use the PSP complementary to the standard hospital care. The number of hospitals has increased up to 30. Four hospitals in the North included in total 203 patients, seven hospitals in the East included 100 patients, five hospitals in the South included in total 44 patients and fourteen hospitals in the West included in total 312 patients.

Conclusion: The use of a PSP program for patients suffering from PEI can be a useful tool to support the management of this condition in The Netherlands, while enhancing patient ownership of their treatment.

P-02-05.

Correlation between endoscopic ultrasound features according to Rosemont criteria and exocrine pancreatic function in chronic pancreatitis

Caterina Stornello^{1,2}, Chiara Deli¹, Giuseppe Dell'Anna¹, Gaetano Lauri¹, Matteo Tacelli¹, Gemma Rossi¹, Piera Zaccari¹, Maria Chiara Petrone¹, Calogero Cammà², Gabriele Capurso¹, Paolo Giorgio Arcidiacono¹

¹ Pancreato-biliary Endoscopy and EUS Division, San Raffaele Scientific Institute IRCCS, Milan, Italy

² Section of Gastroenterology & Hepatology, Department of Health Promotion, Mother and Child Care, Internal Medicine and Medical Specialties, PROMISE, Palermo, Italy

Abstract

Background: Chronic pancreatitis (CP) is a pancreatic progressive disease in which inflammatory episodes result in replacement of the parenchyma by fibrous connective tissue leading to endocrine and pancreatic exocrine insufficiency (PEI). Endoscopic ultrasound (EUS) is the most sensitive method to diagnose CP in its early stage, and Rosemont criteria are used to classify its findings. Since data on the correlation between EUS features and PEI are scarce, our aim is to investigate them.

Methods: This is a retrospective, monocentric cohort study concerning patients prospectively enrolled and followed-up from 2016 to 2021, with definite/probable CP according to M-ANNHEIM diagnostic criteria. All patients had a EUS performed and known data about exocrine function, both within 12 months from the diagnosis of CP. PEI was diagnosed for faecal elastase (FE) values ≤ 200 mcg/g or when overt steatorrhea was reverted by pancreatic enzyme replacement therapy. Chi-square test, Fisher's exact test, Kruskal-Wallis test were used as appropriate. To evaluate the association between EUS features and PEI, logistic regression analyses and Rank correlation were performed. ROC curve and area under the curve (AUROC) were calculated to determine accuracy of Rosemont criteria in predicting PEI. $P < 0.05$ was considered statistically significant.

Results: 128 patients were examined (63.3% male, mean age 47 years; 95% CI 44–50). Aetiology was exotoxic in 43.7%. 69.5% had diagnosis of PEI (69.7% based on reduced FE). At multivariate logistic regression among all the Rosemont features, only the presence of lithiasis in main pancreatic duct (MPD) was associated with increased risk of PEI (OR 2.92, 95% CI 1.29–6.61; $p = 0.01$); autoimmune aetiology was the only other statistically significant factor (OR 8.48, 95% CI 1.04–69.40; $p = 0.04$). Rank analysis showed a weak significant inverse correlation between Rosemont categories and FE values (Spearman's $\rho = -0.02$; $p = 0.03$). Accuracy of Rosemont in predicting PEI was moderate with AUROC: 0.62 ($p = 0.014$, sensitivity 69.7%, specificity 53.8%).

Conclusion: EUS structural findings seem of limited help identifying patients at risk for PEI but for lithiasis of the MPD. Dynamic and functional tools used during EUS, such elastography and pancreatic function tests (secretin), could improve the usefulness of EUS in evaluating PEI.

P-02-06.

Pancreatic exocrine insufficiency is a risk factor for kidney stones in patients with chronic pancreatitis

Miroslav Vujasinovic^{1,2}, Ana Dugic², Tomas Thiel³, Anders Kjellman³, Caroline Yang², J.- Matthias Löhri⁴

¹ Department of Upper Abdominal Diseases, Karolinska University Hospital, Stockholm, Sweden

² Department of Medicine, Huddinge, Karolinska Institute, Stockholm, Sweden

³ Department of Urology, Karolinska University Hospital, Stockholm, Sweden

⁴ Department of Clinical Science, Intervention, and Technology (CLINTEC), Karolinska Institute, Stockholm, Sweden

Abstract

Background: Most patients with chronic pancreatitis (CP) develop pancreatic exocrine insufficiency (PEI) over the course of the disease. PEI may lead to hyperoxaluria and development of urinary oxalate stones. It has been postulated that the patients with CP may be at increased risk of kidney stone formation, but the data is scarce. We aimed to estimate incidence and risk factors for nephrolithiasis in a Swedish cohort of patients with CP.

Methods: We performed retrospective analysis of an electronic medical database of patients diagnosed with definite CP during 2003–2020. We excluded patients < 18 years of age, those with missing relevant data in medical charts, patients with probable CP (according to the M-ANNHEIM classification system) and those in whom kidney stones were diagnosed before CP diagnosis.

Results: Some 632 patients with definite CP were followed over a median of 5.3 (IQR 2.4–6.9) years. There were 41 (6.5%) patients diagnosed with kidney stones, of whom 33 (80%) were symptomatic. Comparing to patients without kidney stones, patients with nephrolithiasis were older, with median age of 65 (IQR 51–72) years, and a male predominance (80% vs 63%). Cumulative incidence of kidney stones was 2.1%, 5.7%, 12.4% and 16.1% at 5, 10, 15, and 20 years after CP diagnosis, respectively. Multivariable cause-specific Cox regression analysis revealed PEI as independent risk factor for nephrolithiasis (adjusted HR 4.95, 95%CI 1.65–14.84; $p = 0.004$). Another risk factors were increase in BMI (aHR 1.16 95% CI 1.04–1.30; $p = 0.001$ per unit increment), and a male sex (4.51, 95% CI 1.01–20.3, $p = 0.049$).

Conclusion: PEI and increase in BMI are risk factors for kidney stone development in patients with CP. Male CP patients are particularly at increased risk of nephrolithiasis. This should be taken into consideration in general clinical approach to raise awareness among patients and medical workers.

P-02-07.

Diagnostic accuracy of faecal elastase-1 test for the diagnosis of pancreatic exocrine insufficiency: a systematic review and meta-analysis

Daniel de la Iglesia-Garcia^{1,2}, Marco Galego-Fernandez^{1,2}, Alberto Rama-Fernandez^{1,2}, Jose Lariño-Noia^{1,2}, Julio Iglesias-Garcia^{1,2}, J. Enrique Dominguez-Muñoz^{1,2}

¹ Department of Gastroenterology and Hepatology, University Hospital of Santiago de Compostela, Santiago de Compostela, Spain

² Research Health Institute of Santiago de Compostela (IDIS), Santiago de Compostela, Spain

Abstract

Background: Pancreatic exocrine insufficiency (PEI) has been recently defined as a reduction of pancreatic exocrine secretion and/or intraluminal