

Abstract ID: 1742.**Hyperapelinemia – marker of progression of metabolic disorders in the pancreas**

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Introduction: Apelin is an adipocytokine, which can be considered as unifying link for metabolic disorders in patients with chronic pancreatitis (CP) and type 2 diabetes mellitus (T2DM).

Aims: The aim of this study was to determine the contributing factors of pancreatic metabolic disorders in patients with CP and T2DM.

Patients & methods: 82 patients were examined (37 males; mean age 58.13±1.64), group 1 - CP and T2DM (n=62); 2^d group - CP alone (n=20). The survey plan included: BMI, elastase-1, α -amylase, CRP, apelin, cholesterol (CH), triglycerides (TG), glucose, HbA1c, HOMA-IR, insulin (IRI).

Results: The higher serum level of α -amylase was found in group 1 rather than in group 2 (25.64±1.45 vs 17.08±0.69, p<0.05), levels of elastase-1 were 131.4±5.4 vs 180.6±0.92 (p<0.05), respectively. Level of CRP in group 1 was higher than in comparison group (7.90±0.94 vs 3.21±0.19, p<0.05), apelin level 349.9±12.7 vs 262.2±7.4, p<0.05, respectively. Group 1 demonstrated higher levels of glucose, HbA1c, HOMA-IR, IRI. We have found 1.8-fold and 1.7-fold increase of CH and TG levels in group 1 (6.10±0.15 and 2.41±0.11) vs group 2 (3.38±0.06 and 1.36±0.13; p<0.05). The following correlations were found between apelin and other indexes: CRP ($r_1=0.74$; $r_2=0.67$, p<0.05), elastase-1 ($r_1=-0.63$; $r_2=-0.54$, p<0.05), HOMA-IR ($r_1=0.64$, $r_2=0.54$, p<0.05), CH ($r_1=0.39$; $r_2=0.54$, p<0.05) and TG ($r_1=0.56$, $r_2=0.54$, p<0.05).

Conclusion: The obtained data suggest the use of apelin as a possible marker of metabolic disorders in pancreas of patients with comorbid CP and T2DM.

Abstract ID: 1744.**The prevalence of osteoporosis is increased in patients with chronic pancreatitis and associates with several risk factors**Jakob Lykke Poulsen¹, Louise Kuhlmann¹, Marianne Kohler², Henrik Hojgaard Rasmussen², Peter Vestergaard³, Asbjorn Mohr Drewes¹, Soren Schou Olesen¹

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Introduction: Chronic pancreatitis (CP) is associated with risk factors that may negatively influence bone metabolism and increase the risk of developing osteoporosis and low energy fractures.

Aims: We have evaluated the prevalence of osteoporosis and its associated risk factors in CP outpatients.

Patients & methods: This was a cross-sectional study of 67 CP outpatients conducted at a tertiary referral centre. Dual-energy x-ray absorptiometry scan was used to examine bone mineral density (BMD) for the columnar spine and femoral head. The primary outcome was the prevalence of osteoporosis in CP, this was compared to age and gender matched population derived normative data of Danish citizens. Several clinical and demographic parameters, including exocrine pancreatic insufficiency, 25-OH-Vitamin-D level, as well as muscle function and strength were analysed for their association with BMD.

Results: The median age of CP patients was 60 years (IQR 51-68) and 40% were women. The prevalence of osteoporosis was 26.9% in patients

with CP compared 9.1% in the population of Danish citizens (OR 2.4[95% CI: 1.0-5.7]; P=0.042). Muscle function (Timed Up and Go Test), 25(OH)-Vitamin-D level and BMI were independently associated with BMD at the femoral head (all p<0.001); diabetes (p=0.03) and exocrine pancreatic insufficiency (p=0.006) were independently associated with BMD in the columnar spine.

Conclusion: Patients with CP have an increased risk of osteoporosis compared to the background population and it associates with several modifiable risk factors. This information should be implemented in outpatient monitoring strategies to improve bone health and decrease risk of low energy fractures.

Abstract ID: 1747.**The Scandinavian Baltic Pancreatic Club (SBPC) Database: Design, Rationale and Characterisation of the Study Cohort**Soren Schou Olesen¹, Johanna Laukkarinen², Asbjorn Mohr Drewes¹, Camilla Nojgaard³ For The Scandinavian Baltic Pancreatic Club⁴

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Introduction: Chronic pancreatitis (CP) is a multifaceted disease associated with several risk factors and a complex clinical presentation.

Aims: We established the Scandinavian Baltic Pancreatic Club (SBPC) Database to characterise and study the natural history of CP in a Northern European cohort. Here we describe the design of the database and characteristics of the study cohort.

Patients & methods: Nine centres from six different countries in the Scandinavian-Baltic region joined the database. Patients with definitive or probable CP (M-ANNHEIM diagnostic criteria) were included. Standardised case report forms were used to collect several assessment variables including disease aetiology, duration of CP, preceding acute pancreatitis, as well as symptoms, complications, and treatments. The clinical stage of CP was characterised according to M-ANNHEIM. Yearly follow-up is planned for all patients.

Results: The study cohort comprised of 910 patients (608 men: 302 women; mean [IQR] age 58.4 [48.4 to 67.2] years) with definite 848 (93%) or probable CP 62 (7%). Nicotine (70%) and alcohol (59%) were the most frequent aetiologies and seen in combination in 44% of patients. A history of recurrent acute pancreatitis was seen in 49% prior to development of CP. Pain was the most common complication (69%) followed by exocrine pancreatic insufficiency (68%) and diabetes (43%). Most patients (30%) were classified as clinical stage II (symptomatic CP with exocrine or endocrine insufficiency). Less than 10% of the patients had undergone pancreatic surgery.

Conclusion: The SBPC database provides a mean for future prospective, observational studies of CP in the Northern European continent.

Abstract ID: 1748.**Nuclear UCHL5 Expression Associates with Increased Patient Survival in Pancreatic Ductal Adenocarcinoma**Kapo Saukkonen¹, Leena Arpalaiti¹, Jaana Hagström¹, Harri Mustonen², Hanna Seppänen², Caj Haglund¹, Carina Holmberg¹

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