FROM VISION TO DECISION

SEMINAR FRIDAY 21.02.2014

PLACE: MedViz Facilities., Møllendalsbakken 7, 5th floor

TIME : 12:00-13:00

OPENING SEMINAR IN THE NEW MEDVIZ INCUBATOR

SPEAKERS/TITLES

Erling Tjora, Consultant Haukeland University Hospital
Title: Evaluation of pancreatic function in CEL-MODY and HNF1B-MODY

Trond Engjom, Consultant, Haukeland University Hospital
Title: Secretin stimulated ultrasound of the pancreas in cystic fibrosis and chronic pancreatitis.

Gaute Kjellevold Wathle, Consultant, Haukeland University Hospital
Title: Quantification of exocrine pancreatic function with secretin-stimulated MRCP and DWI in healthy individuals

ABSTRACT

Tjora

Aims: To evaluate the nature and degree of exocrine pancreatic dysfunction in CEL-MODY and HNF 1B-MODY
Conclusions: Pancreatic function is reduced in HNF1B-MODY and CEL-MODY. Digestive enzyme output is severely reduced in CEL-MODY. In HNF1B-MODY there is hypersecretion from a small gland, indicating hypoplasia and not atrophy of the pancreas in this condition. No hypersecretion and altered apparent diffusion coefficient in CEL-MODY patients indicate a tissue changing disease process in this condition.

Engjom

Exocrine pancreatic failure is a result from various diseases affecting the pancreas. Due to new treatment modalities addressing the ductal pancreatic failure in Cystic fibrosis (CF), there is a need for non-invasive methods to estimate ductal pancreatic function. Secretin MRCP is present the best evaluated imaging method for this question. We have evaluated fluid filling of the Wirsung duct and descending duodenum after secretin stimulation by transabdominal ultrasound, and find that our measures obtained by this method correlate well to exocrine pancreatic failure both in cystic fibrosis and chronic pancreatitis.

Wathle

We assessed exocrine pancreatic function in healthy individuals with secretin-stimulated MRCP including diffusion weighted images (DWI). The results were compared to duodenal intubation after secretin stimulation, considered to be the gold standard test for exocrine pancreatic function. We found a positive correlation between pancreatic secretion 1 min. after secretin (based on the MRI series) and the duodenal intubation test. We also found a positive correlation between the apparent diffusion coefficient (calculated from the DWI series) and secreted pancreatic juice volumes.