gutflix
GI learning, personalised

Summary

The Adipose-Driven Pancreatic Inflammatory Niche in Pancreatitis: Today and Tomorrow

Max Ole Hubert

UEG Week Barcelona 2026 | Presentation

Mechanisms & Personalised Medicine | Immunology

October 20, 2026

The speaker presents a new conceptual framework called the adipose driven pancreatic inflammatory niche (APIN) that defines adiposity as a master switch explaining how local acute pancreatitis progresses to necrotising systemic disease.

KEY POINTS

- The APIN framework comprises three compartments: the intra-acinar compartment where adiposity causes calcium dysregulation, impaired autophagy, increased misfolded proteins, and free fatty acid toxicity leading to excess acinar necrosis; the intrapancreatic compartment where adiposity drives meta-inflammation, pro-inflammatory macrophage polarization, increased neutrophil NETosis, and T-regulatory cell ferroptosis; and the peripancreatic systemic compartment where lipase released from necrotic acinar cells hydrolyses expanded visceral adipose tissue producing excess free fatty acids that cause organ failure.
- The speaker states this framework moves beyond associative correlations between obesity and acute pancreatitis severity to provide mechanistic explanations.
- The speaker recommends using the APIN framework to reinterpret current trials and restructure future trials, focusing particularly on adipose patient subgroups in studies such as the KAPO trial targeting calcium channels, Chinese COX-2 trials, the RAPID-1 infliximab trial, and the RABI-767 trial delivering lipase inhibitors into the peripancreatic space.
- During discussion, the speaker stated that even in lean patients the amount of visceral adipose tissue correlates with outcomes, and that MRI is the gold standard for detecting intrapancreatic fat while CT is best for quantifying visceral abdominal tissue.
- The speaker noted preliminary data suggesting acinar cells from obese mice may be primed for lower injury thresholds, and that alcohol increases toxicity through esterification of free fatty acids.

VIEW THIS CONTENT ON GUTFLIX

https://gutflix.eu/search/d/3c9fb7ca-d150-11f1-886f-daaa6dbee0a2

AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.