The Pancreatic Cyst Program

The Pancreatic Cyst Program at the Perelman School of Medicine and Penn Medicine is nationally recognized for clinical research and superlative care for its patients. We are pleased to announce the following recent honors and awards accorded our faculty.

Translational Research in Pancreatic Cancer

The 9th annual meeting of pancreatic ductal adenocarcinoma (PDAC) was held in San Diego. Cancers of this type are the fourth leading cause of cancer deaths in the U.S. PDAC is the most aggressive of the pancreatic cancers and has a poor prognosis due to its tendency to metastasize early in the disease process. The main causes of PDAC are obesity, diabetes, and smoking.

The conference featured presentations on the latest research in PDAC, including the role of inflammation and immune suppression in the disease. The conference also highlighted new approaches to PDAC prevention and treatment, such as immunotherapy and targeted therapy. The conference was an important event for researchers, clinicians, and patients to discuss the latest advances in PDAC research and to work towards finding better treatments and outcomes for PDAC patients.
Pancreatitis Research

The randomization scheme that was chosen was a stratified randomization with the following stratification factors: age, pancreatic ductal anatomy, and tumor size. Each patient was randomly assigned to one of two groups: the immediate treatment group (n = 25) and the delayed treatment group (n = 24). The primary endpoint of the study was the incidence of diabetes mellitus, a well-recognized complication of chronic pancreatitis. The secondary endpoints included the need for surgical intervention, the duration of hospital stay, and the patient's quality of life. The study was conducted in accordance with the Declaration of Helsinki and all ethical guidelines, and informed consent was obtained from all participants.

EMT and Dissemination Precede Pancreatic Tumor Formation

Carcinoma, two major puzzles have been proposed to explain the invasive behavior. The first, a classical model, uses oncogenes as the third step in a progressive sequence in which tumors acquire alterations in specific pathways, such as the RAS/RAF and the PI3K/AKT pathways, leading to increased cell growth and migration. The second, a more recent model, suggests that tumor cells undergo epithelial-mesenchymal transition (EMT), a process that allows them to adopt an invasive and migratory phenotype.

The Penn team discovered that targeted cytokines induced the suppression of T cell responses in a mouse model of pancreatic cancer. This work was published in The Journal of Immunology.

Pancreatic Cyst Management

The Penn Pancreatic Cyst Program offers a single point of access for a collaborative, multidisciplinary team of experts in pancreatic cyst management. Our goal is to optimize clinical care for patients with pancreatic cysts, as well as to provide reassurance and enhance the collective education and expertise of the field.

A component of the Program, the Pancreatic Cyst Management Conference, meets every other week to offer to physicians in the region a single point of access to a collaborative, multidisciplinary team of experts in pancreatic cyst management. At each meeting, physicians from gastrointestinal surgery, gastroenterology, radiology, and cytology collaborate to discuss cases of individual patients.

In explaining the Conference, Dr. Ahmad emphasized its integrative and collaborative purpose. “Each week, physicians submit cases to the conference for Dr. Ahmad and his team of pancreatic surgeons, gastroenterologists, radiologists, and pathologists to discuss. The purpose of the conference is to lead to the development of a comprehensive treatment plan for patients with cysts and/or cancers involved in the patients’ care.”

Given that a substantial proportion of pancreatic cysts are never malignant, or at best premalignant, diagnosis of cancer may present significant challenges and may be delayed. The 10th Conference was moderated by Dr. Ahmad and Dr. Michael J. Maitra, MD, PhD, of the University of Pennsylvania. The conference was attended by physicians from across the region and was broadcast live via videoconference.

The Penn Pancreatic Cyst Program Under the direction of Dr. Ahmad, MD, the Penn Pancreatic Cyst Program offers a single point of access to a collaborative, multidisciplinary team of experts in pancreatic cyst management. The goal of the Conference is to provide an opportunity for recent advances in the field to be discussed and disseminated within the community.