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PANCREAS CLUB

Proceedings of the 49th Annual Pancreas Club Meeting

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Introduction

The 49th annual Pancreas Club meeting was held May 15th and 16th, 2015, at the Washington Court hotel in Washington, DC. Three hundred and three attendees included pancreatologists from 20 countries. Sixty-one oral presentations and 165 posters were presented over the 2-day meeting. Table 1 documents oral abstract titles with institutional affiliation. Full abstracts for all oral presentations and posters are available at the pancreas club website, http://pancreasclub.com. Representative papers from each of the eight sessions are summarized below.

The Pancreas Club honored Professor Claudio Bassi of Verona, Italy, for a lifetime of outstanding contribution to the science of pancreatology; at the annual banquet, Professor Bassi regaled the crowd with his musical talent.

Session 1: PNET/Prognostics

Paper s006: Proposal of a New Staging System for Ampulla of Vater Cancer with Higher Distinction Ability

Investigators from Seoul National Medical Center and Johns Hopkins Hospital analyzed an enormous cohort of 841 patients with ampulla of Vater carcinoma. R0 resection was achieved in 94 % of patients, and 55 % of patients manifest lymph node-negative disease. The major break point in the survival curve hinged on lymph node involvement: node-negative patients had 5-year survival ranging from 60 to 80 %, while node-positive patients had 5-year survival of 18–25 %. Based on these data, the authors suggested a new staging system combining T2 and T3 tumors and the N stage according to the number of positive lymph nodes. Brisk discussion included the important concept of segregating these tumors into intestinal versus pancreatobiliary subtypes, and the subsequent adjuvant treatment strategy.

Session II: IPMN/Access to Care

Paper S010: The Risk of Malignancy in 1,712 Patients Resected for IPMN of the Pancreas: a Report from the Pancreatic Surgical Consortium

The pancreatic surgical consortium (investigators from Verona, Massachusetts General Hospital, Memorial Sloan Kettering Cancer Center, and Johns Hopkins Hospital) reported outcomes from 1700 patients resected for intraductal papillary mucinous

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Table 1 Oral abstract titles with institutional affiliation

Paper#	Title	Primary Institution
Scientific session I		
Topic: PNET/prognostics		
1	Operative vs. non-operative management of nonfunctioning pancreatic neuroendocrine tumors	Massachusetts General Hospital
2	Long-term outcomes of surgical management of pancreatic neuroendocrine tumors with synchronous liver metastases	Ancona, Italy; Lubeck, Germany
3	Trends in hospital volume and failure to rescue for pancreatic surgery	Johns Hopkins Hospital
4	HLA class I expression as a favorable prognostic biomarker in pancreatic ductal adenocarcinoma (PDAC)	Massachusetts General Hospital
5	A proposal for improved staging of pancreatic ductal adenocarcinoma after pancreaticduodenectomy	Johns Hopkins Hospital
6	Proposal of a new staging system for ampulla of Vater cancer with higher distinction ability; multinational study from Eastern and Western	Seoul National University, Korea
7	Para-aortic lymph nodes metastases from ductal adenocarcinoma of the pancreas: do they really make a difference	University of Verona, Italy
8	Long term survival in surgically resected pancreatic cancer: characteristics of 10-year survivors using the National Cancer Database	University of Colorado
Scientific session II		
Topic: IPMN/access to care		
9	International multicenter study to characterize the individual risk of malignancy in branch duct IPMN and proposal of nomogram	Multicenter, Korea and Japan
10	The risk of malignancy in 1,712 patients resected for intraductal papillary mucinous neoplasms (IPMN) of the pancreas: a report from the Pancreatic Verona, Memorial Sloan Kettering Surgical Consortium	Johns Hopkins, Massachusetts General
11	Tumor-associated neutrophils and malignant progression in intraductal papillary mucinous neoplasms: an opportunity for identification of high-risk disease	Memorial Sloan Kettering Cancer Center
12	The natural history of non-resected IPMN of the pancreas: a single institution experience	Karolinska Institute, Sweden
13	The impact of rurality and access to gastroenterologists on disparities in pancreas cancer staging and mortality	Southern Illinois University
14	Adherence to expected treatment for pancreatic cancer improves outcomes	University of Pittsburgh
15	Trends in receipt and timing of multimodality therapy in early stage pancreatic cancer	University of Texas Medical Branch
Scientific session III		
Topic: surgical techniques		
16	Pancreatogastrostomy versus pancreatojejunostomy for reconstruction after pancreatoduodenectomy (recopanc)—results of a multicenter randomized controlled trial	University Lübeck, Germany
17	Randomized clinical trial of duct-to-mucosa pancreaticogastrostomy of pancreatic stump versus hand-sewn closure after distal pancreatectomy	Hiroshima University, Japan
18	Distal pancreatectomy with celiac axis resection: what are the added risks?	Multicenter/Indiana University
19	Early national experience with laparoscopic pancreaticoduodenectomy (LPD) for ductal adenocarcinoma (PDCA): a comparison of LPD and open pancreatico-duodenectomy (OPD) from the National Cancer Data Base	Northshore/University of Chicago
20	Prospective trial of 200 consecutive pancreatico-duodenectomies with the Finnish binding	Tampere University Hospital, Finland

Table 1 (continued)

Paper#	Title	Primary Institution
	pancreaticojejunostomy (FBPJ): a low frequency of pancreatic fistula	
21	Mesopancreatic tumor stromal-negative resection defines radical resection of pancreatic head cancer and can be predicted by preoperative radiologic parameters	University Lübeck, Germany
22	Leakage of an invagination pancreaticojejunostomy may have lethal consequences	Thomas Jefferson/multicenter
23	Long term oncologic outcomes after robotic resections are not inferior to open for pancreas cancer	University of Pittsburgh
24	After pancreatectomy epidural dysfunction increases postoperative complications	St. Luke's Hospital, Boise
25	Lymphadenectomy for periampullary cancer: prognostic role of different metastatic nodal stations and of the number of metastatic lymph nodes	Rome, Italy, and Lyon, France
Scientific session IV		
Topic: pancreatitis		
26	Quality of life trends in patients undergoing surgery for chronic pancreatitis	PGIMER Chandigarh, India
27	Timing of cholecystectomy after mild biliary pancreatitis: a randomised controlled multicenter trial	Multicenter, Netherlands
28	Total pancreatectomy and islet cell autotransplantation as salvage therapy for patients failing previous surgical interventions for chronic pancreatitis	University of Cincinnati
29	Early nasoenteric versus on demand feeding in predicted severe acute pancreatitis: a multicenter randomized controlled trial	Multicenter, Netherlands
30	Mischaracterization of pancreatic necrosectomy in ACS-NSQIP	Stanford University
31	Comparison between Ki-67 labelling index on EUS-guided fine-needle aspiration and relative surgical specimen after curative surgery: a single center experience of 49 consecutive cases	IRCSS Milan, Italy
Scientific session V		
Topic: basic science studies in pancreatic cancer		
32	CDK4/6 inhibitors are potent suppressors of pancreatic carcinoma growth	University of Texas Southwestern
33	A novel PARP inhibitor resistance mechanism mediated by the RNA-binding protein HuR	Thomas Jefferson University
34	Pharmacological inhibition of BET bromodomains suppresses tumor growth and prolongs survival in a preclinical model of pancreatic cancer	Massachusetts General Hospital
35	Very long-term survival following resection for pancreatic cancer is not explained by common genetic alterations: results of whole-exome sequencing analysis	Johns Hopkins University
36	A novel immunocompetent murine model of pancreatic cancer with robust stroma: a valuable tool for pre-clinical evaluation of new therapies	University of Minnesota
37	Targeting tumor-associated hypoxia to overcome chemoresistance in pancreatic ductal adenocarcinoma	Thomas Jefferson University
38	Anti-TGF-beta antibody inhibits Treg pathway and induces anti tumor effector T cell responses in a vaccine-dependent manner	Johns Hopkins University
39		Medical College of Wisconsin

Table 1 (continued)

Paper#	Title	Primary Institution
	Copy number variation in cell free DNA in pancreatic cancer patients undergoing neoadjuvant therapy	
Scientific session VI		
Topic: perioperative outcomes		
40	Characteristics and natural history of chyle leak following pancreatectomy	Johns Hopkins Hospital
41	Mortality following pancreatoduodenectomy: the influence of fistula risk	University of Pennsylvania
42	Drain management following pancreatoduodenectomy: reappraisal of a prospective randomized trial using risk stratification	University of Pennsylvania
43	Clinical risk score to predict pancreatic fistula after pancreatoduodenectomy: independent external validation for open and laparoscopic approaches	Mayo Clinic
44	Prospective scoring of all adverse events within 90 days: the standard for reporting surgical outcomes after pancreatectomy	MD Anderson Cancer Center
45	Discordance between perioperative antibiotic treatment and wound infection cultures in patients undergoing pancreaticoduodenectomy: a multicenter 5-year study	Multicenter, Mass General, U Penn, VERONA
46	A novel risk scoring system reliably predicts readmission following pancreatectomy	Johns Hopkins University, U Penn
47	The results of two randomized clinical trials to reduce delayed gastric emptying after pancreaticoduodenectomy	Wakayama University, Japan
48	Pancreaticojejunostomy stricture after pancreatoduodenectomy: outcomes after operative revision	Indiana University
49	Natural history of the pancreatic remnant after resection of IPMN: preliminary results from a multi-institutional international study	Karolinska Institute/multinational
50	A contemporary evaluation of the cause of death and long-term quality of life after total pancreatectomy	Johns Hopkins
51	Metabolic effect of pancreatoduodenectomy: in comparison with distal pancreatectomy	Seoul National University, Korea
Scientific session VII		
Topic: neo-adjuvant treatment and borderline resectable pancreatic cancer		
52	Neoadjuvant chemoradiation for T4 pancreatic adenocarcinoma: a gemcitabine, docetaxel, and capecitabine protocol offers superior outcomes	Columbia University
53	The role of neoadjuvant stereotactic body radiation therapy in borderline resectable and locally advanced pancreatic cancer	Johns Hopkins Hospital
54	Peri-operative outcomes following pancreatectomy with concomitant arterial procedures	Mayo Clinic
55	Pancreatectomy plus resection of peripancreatic vessels: impact of post-operative complications on long-term survival	University of Pisa, Italy
56	Importance of preoperative ca 19-9 levels in patients with localized pancreatic cancer treated with neoadjuvant therapy	Medical College of Wisconsin
57	Impact of chemoradiotherapy followed by surgery for locally advanced adenocarcinoma—comparison of clinicopathological features between	Mie University School of Medicine, Japan PANCREATIC

Table 1 (continued)

Paper#	Title	Primary Institution
	single-agent gemcitabine and s-1/gemcitabine combination therapy	
58	Neoadjuvant therapy with anatomical borderline pancreatic ductal adenocarcinoma. Does it make difference?	Johns Hopkins Hospital
59	Survival outcomes of patients with resectable pancreatic cancer receiving neoadjuvant therapy	Medical College of Wisconsin
60	A tale of two cities: reconsidering adjuvant radiation in pancreatic cancer care	Beth Israel Deaconess Medical Center
61	Timing of staging diagnostic laparoscopy prior to neoadjuvant therapy in patients stratified according to AHPBA/SSO/SSAT consensus definitions of resectability	Dartmouth Hitchcock Medical Center

neoplasm (IPMN). Patient demographics and tumor characteristics were similar among the four participating institutions. Of these patients, 44 % had branch duct, 24 % had main duct, and 32 % had mixed-type IPMN. The overall rate of invasive carcinoma was approximately 10 %. Patients with branch duct IPMN <2 cm had a 3 % incidence of invasive cancer. Discussion highlighted the crux of the problem in IPMN: how to determine whether patients have low- or high-risk disease.

Session III: Surgical Techniques

Paper SO19: Early National Experience with Laparoscopic Pancreaticoduodenectomy for Ductal Adenocarcinoma: a Comparison of Laparoscopic Pancreaticoduodenectomy and Open Pancreaticoduodenectomy from the National Cancer Database

The group from Northshore University Health System in Evanston, IL, identified NCDB patients that had undergone pancreaticoduodenectomy either laparoscopically or by open approach. In 2010 and 2011, 384 patients underwent laparoscopic pancreaticoduodenectomy (LPD) and 4037 underwent open pancreaticoduodenectomy (OPD). The authors identified an independent association between procedure type (LPD vs. OPD) and perioperative mortality with patient undergoing LPD demonstrating an increased risk of perioperative mortality. The authors also determined that the increased risk was attributable to a learning curve for the procedure. Multivariate regression broken down by hospital volume demonstrated that in centers performing more than ten LPDs per year, there was no difference in overall mortality associated with LPD. Significant discussion highlighted limitations of registry databases; for example, no way exists in the NCDB to determine whether patients had planned diagnostic laparoscopy or had conversion from laparoscopy to open operation because of intraoperative problems.

Session IV: Pancreatitis

This session focused on the state of the art for clinical management of acute and chronic pancreatitis. Several outstanding papers in this session included two randomized clinical trials from the Dutch pancreatitis study group and a report on the feasibility of autologous islet transplantation for patients having had a prior operation for chronic pancreatitis.

Paper SO29: Early Nasoenteric Versus On Demand Feeding in Predicted Severe Acute Pancreatitis: a Multicenter Randomized Controlled Trial

The Dutch Pancreatitis Study Group reported results from their PYTHON trial in which 19 hospitals randomized 208 patients with severe acute pancreatitis to early (<24 h) nasojejunal feedings or on-demand feeding. Patients in the on-demand group were asked at 72 h post admission if they wanted to eat. If they could not eat, they were started on nasojejunal tube feeding. In the on-demand group, 69 % of patients tolerated a diet. The primary composite end point included rate of infectious complications and 6-month mortality. The finding of no difference between groups led the authors to conclude that an on-demand approach was reasonable.

Session V: Basic Science Studies in Pancreatic Cancer

Paper S036: Novel Immunocompetent Murine Model of Pancreatic Cancer with Robust Stroma: a Valuable Tool for Pre-clinical Evaluation of New Therapies

The University of Minnesota group presented preliminary data describing a novel immunocompetent model of pancreatic cancer. The model involves resecting pancreatic adenocarcinoma tumors spontaneously developing in KPC mice (Pdx-Cre KrasG12D/+p53−/−) and implanting these tumors in the

pancreas of immunocompetent C57/BL6 mice. Overall, 60 % of these mice subsequently developed liver metastases, and nearly 80 % developed peritoneal carcinomatosis. The major advantage of this novel model lies in recapitulating (and therefore permitting manipulation of) each tumor component—epithelial, immune, and stroma. In addition, the reproducible and consistent growth rate makes it an excellent mimic of human pancreatic adenocarcinoma.

How I Do It Session: Minimally Invasive Management of Pancreatic Necrosis

A balanced and international panel discussed contemporary management of necrotizing pancreatitis from both surgical and GI endoscopy perspective. Brisk discussion surrounded clinical cases, offering several take-home messages. Important concepts include the necessity of one physician to "take charge" of patient's care and the fact that an individual patient's anatomy and clinical course must dictate specific care. Video record of this session is available on the pancreas club website www.pancreasclub.com.

Session VI: Perioperative Outcomes

Paper SO42: Drain Management Following Pancreatoduodenectomy: Reappraisal of a Prospective Randomized Trial Using Risk Stratification

The Philadelphia group presented their effort to risk stratify patients undergoing pancreaticoduodenectomy for selective drain placement. Among 106 patients previously analyzed in a prospective database, a 29 % fistula rate was observed. Twenty-five percent of patients were identified preoperatively as low risk for developing a post-operative pancreatic fistula and were managed without drain placement. On retrospective review of post-operative outcomes, a negligible incidence of clinically relevant pancreatic fistula was seen in this low-risk group. The current practice of these surgeons is to manage low-risk patients without intraoperative drains. Patients identified as moderate to high risk have drains placed with early drain removal based on post-operative day 1 and 5 drain amylase values. The authors are planning a prospective study of this approach.

Session VII: Neoadjuvant Treatment and Borderline Resectable Pancreatic Cancer

Paper SO59: Survival Outcomes of Patients with Resectable Pancreatic Cancer Receiving Neoadjuvant Therapy

The Medical College of Wisconsin group presented their series of 69 resectable pancreatic cancer patients treated with neoadjuvant chemo- or chemoradiotherapy. In this group, nine patients were found to have disease progression prior to resection or at attempted exploration. Of the 60 that were resected, 97 % of patients had a margin-negative resection. Median overall survival was 44.9 months for patients that completed optimal treatment: neoadjuvant chemoradiotherapy and resection and post-operative adjuvant chemotherapy. Median overall survival was 46.3 months for node-negative patients and 24 months for node-positive patients.

The annual meeting concluded with an invitation to attend the 2016 meeting, which will be held May 20–21, 2016, at the Hyatt Regency Mission Bay in San Diego, CA.