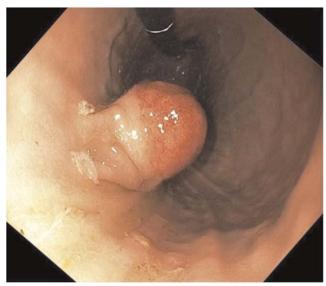


[2790] Figure 1. Post-treatment gastric mass CT/PET.



[2790] Figure 2. Pre-treatment gastric mass endoscopy.

SUBMITTED, NOT PRESENTED: BILIARY/PANCREAS

Metastatic Lesions to the Pancreas: A Tertiary EUS Center Experience

Chencheng Xie, MD¹, Mohamed Abdallah, MD², Bhaveshkumar Patel, MD², Kimberlee Bohy, MD², Khalil Aloreidi, MD³, Hafez Mohammad A. Abdullah, MD², Ramu Sudhagoni, PhD², Rabia Kiani, MD², Muslim Atiq, MD, MPH².

¹University of South Dakota / Thomas Jefferson University, Sioux Falls, SD; ²University of South Dakota Sanford School of Medicine, Sioux Falls, SD; ³The Brooklyn Hospital Center, Brooklyn, NY.

INTRODUCTION: Metastatic lesions of the pancreas present with varying clinical features and biological behaviors. They account for approximately 2% of all pancreatic lesions. This study was conducted to investigate metastatic pancreatic lesions distinctive clinical and EUS features compared to primary solid pancreatic neoplasms.

METHODS: Patients who underwent EUS-FNA at a tertiary referral center between July 15th, 2011 and November 30th, 2017 for a solid pancreatic neoplasm were identified. Data on clinical features, cross-sectional imaging findings, EUS findings, and cytology results were collected. The clinical and EUS features in patients with metastatic pancreatic lesions were compared with those with intrinsic solid pancreatic tumors (adenocarcinoma and neuroendocrine tumors).

RESULTS: 8 patients who underwent 9 EUS-FNA procedures were diagnosed with a metastatic pancreatic lesion while 184 cases of solid primary pancreatic neoplasms (157 adenocarcinomas and 27 neuroendocrine tumors) were found. 5 of 8 metastatic pancreatic lesions were renal cell carcinoma (62.5%). Patients in the metastatic pancreatic lesions group were less likely to present with abdominal pain (33.3% vs. 71.7%, P = 0.014). Patients with metastatic pancreatic lesions also had lower CA 19-9 values (mean value: 82.50 U/mL vs. 4374 U/mL) and more frequently manifested as having multiple pancreatic locations involvement (55.6% vs. 4.9%).

[2791] Table 1. Comparison of clinical and EUS features of metastatic lesions to the pancreas and primary pancreatic neoplasms

Characteristics	Metastatic lesions to the pancreas (N=9)	Solid primary pancreatic cancers (N=184)	P value 0.548	
Age (years)	66.22 ± 11.80	68.68 ± 12.00		
Gender			0.277	
Male	4 (44.4%)	115 (62.5%)		
Female	5 (55.6%)	69 (37.5%)		
CA19-9 (U/mL)	82.50 ± 21.60	4374 ±11206	0.153	
BMI (kg/m²)	26.95 ± 5.96	27.91 ± 6.17	0.646	
Abd pain	3 (33.3%)	132 (71.7%)	0.014	
Jaundice	3 (33.3%)	91 (49.5%)	0.345	
Chronic pancreatitis	1 (11.1)	24 (13%)	0.866	
Mean diameter of lesions	29.67 ± 25.07	33.13 ± 14.37	0.129	
(Cross-imaging) (mm)				
Location of lesions (EUS)			<0.0001	
Head/neck	3 (33.3%)	111 (60.3%)		
Body	1 (11.1%)	30 (16.3%)		
Tail	0	31 (16.8%)		
Others	5 (55.6%)	9 (4.9%)		

 $_{\rm [2791]}$ Table 2. Clinical and EUS characteristics of eight patients with metastatic lesions of the pancreas

Patient	Age/ sex	Presenting symptoms	CA 19-9 (U/ml)	Diameter of mass (mm)	Location of mass (EUS)	Number of passes (needle gauge)	Final Diagnosis
1	71/F	Jaundice	58.0	14.0	Head/neck	1 (22) 5 (25)	Breast cancer
2	85/F	None	147.0	91.0	Body and tail	2 (25)	Gastric mucinous cancer
3	66/F	Abdominal pain, jaundice	67.0	32.0	Head/neck	1 (25)	Small cell lung cancer
4	65/M	None	None	29.0	Uncinate, and tail	2 (25)	Renal cell carcinoma
5	79/M	Abdominal pain	None	41.0	Head/neck, body, and tail	5 (25)	Renal cell carcinoma
6	54/M	None	None	19.0	Body	2 (25)	Renal cell carcinoma
7	56/M	None	None	15.0	Body, and tail	2 (25)	Renal cell carcinoma
8	49/F	Abdominal pain	None	12.0	Head/neck, body, and tail	5 (25)	Renal cell carcinoma

CONCLUSION: The most common metastatic pancreatic lesion is renal cell carcinoma. The clinical manifestation of metastatic pancreatic lesion patients is more insidious and is mostly identified by using surveillance imaging to identify the primary malignancy. A high index of clinical suspicion is needed for diagnosing these cases.

2792

A Retrospective Study of Probiotic Use in Patients With Chronic Pancreatitis

Jose Aponte-Pieras, MD, ScB1, Wahid Wassef, MD2.

¹University of Massachusetts Memorial Medical Center, Uxbridge, MA; ²University of Massachusetts Memorial Medical Center, Worcester, MA.

INTRODUCTION: Chronic pancreatitis is a debilitating condition that develops following recurrent episodes of pancreatitis. It increases morbidity, decreases quality of life and leads to high utilization of medical resources. There is no definitive medical treatment. Studies have shown that gut microbiota may play a role in pancreatitis as bacterial and endotoxin translocation can contribute to severity. Bacteria such as lactobacillus, and bifidobacterium have been noted to be lower in chronic pancreatitis while enterobacteriaceae species were identified at higher levels in those. Probiotics can increase concentrations of bifidobacteria, lactobacilli and streptococci, preventing overgrowth of non-commensals. We are focused on researching new strategies to prevent disease progression and decrease length of hospital stay. METHODS: Retrospective chart review of a database of 86 chronic pancreatitis patients and probiotic use. All patients were cohorted based on severity of disease as rated on EUS using a scale of 1-5 with grades 1-3 grouped as "non-severe" and 4-5 as "severe." We chose a null of 0.05 with a 95% confidence interval for statistical significance. Relative risk assessments were conducted on the rate of severe chronic pancreatitis in users of probiotics versus negative control.

RESULTS: Our initial results revealed that 34% of patients had used probiotics since diagnosis of chronic pancreatitis on EUS. The rate of severe pancreatitis for the cohort of probiotic users was 0.241, and that for negative control was 0.298. A relative risk assessment for our population found a relative risk of 0.81 (95% CI, [0.379-1.727]; P=0.2922) for the rate of severe chronic pancreatitis given exposure to probiotics. The result suggested a potential effect from probiotics on decreasing the risk of having severe chronic pancreatitis but was not statistically significant.

CONCLUSION: There was no significant association between probiotic use and severity of chronic pancreatitis. We cannot exclude that probiotics may have a protective or therapeutic immunomodulatory effect on the microbiome of patients with chronic pancreatitis. This study is limited to a chart review in order to determine the extent of probiotic use in patients and cannot verify compliance with probiotics. We cannot report a correlation between probiotic use and severity of chronic pancreatitis.

2793

Primary Biliary Cholangitis (PBC): Any Differences Between Males and Females?

Kais Zakharia, MD¹, Julian Robles, DM¹, Madalyn Rasor¹, Xiaoping He, MD², Barakat Aburajab Altamimi, MD¹, Arvind Murali, MD², Antonio J. Sanchez, MD².

¹University of Iowa, Iowa City, IA; ²University of Iowa Hospitals & Clinics, Iowa City, IA.

INTRODUCTION: PBC (primary biliary cholangitis) is a cholestatic autoimmune liver disease characterized by destruction of small intrahepatic bile ducts. PBC predominantly affects females but has also been reported in males. Characteristics of PBC in males have not been well described. We aimed to determine the incidence, characteristics, and prognosis of male patients with PBC as compared to females.

METHODS: We performed a retrospective chart review of all patients with biopsy proven PBC seen at our large tertiary care hospital. We collected data on demographics, clinical and laboratory variables, mortality, and liver transplantation if any. Kaplan-Meier analysis was used to determine time to development of hepatic decompensation in patients with PBC, stratified by gender.

RESULTS: We included 290 patients with biopsy-proven PBC, 254 (88%) were females and 36 (12%) were males. Mean age at diagnosis of PBC in males versus females was 50 ± 17 vs 54 ± 12 years, respectively (P=0.09). Body mass index (P=0.3) and presence of Diabetes (P=0.06) were comparable between males and females. Mean alkaline phosphatase was similar between both groups at diagnosis, 334 U/L vs 320 U/L (P=0.61). At the time of diagnosis, 31% of Males had advanced hepatic fibrosis (F3-F4) as compared to 16% of females (P=0.09) (Table). AMA negative PBC was noted in 16% of females versus 0% of males. Disease progression was higher in males; portal hypertension developed in 42% of males vs 16% in females (P<0.001), and decompensated cirrhosis was noted in 33% of males versus 10% of females (P<0.001). Kaplan Meier time to hepatic decompensation showed increased risk of development of hepatic decompensation in males as compared to females (P<0.001) (see figure). Bone disease was higher in females (osteopenia 22.5% and 6% osteoporosis) than males (12.5% and 3%, respectively).

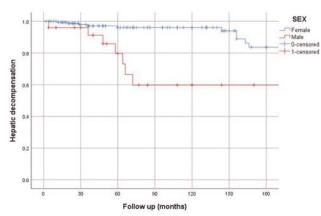
CONCLUSION: Male patients with PBC may have advanced fibrosis at diagnosis as compared to females. Additionally, male PBC patients seem to have a more aggressive course as they are more likely to develop portal hypertension and hepatic decompensation as compared to female patients with PBC, despite comparable age, and alkaline phosphatase level at the time of diagnosis. Bone disease was more common in the females as compared to males.

2794

Subtotal Cholecystectomy Outcomes

Christopher Chum, DO¹, Michael Mun, DO¹, Michael Bernstein, MD¹, John Trillo, MD¹, Samiran Roy Chaudhury, MD¹, Mohammad K. Choudhry, MD², Ahmed Daniyaal Rasheed³.

¹Coney Island Hospital, Brooklyn, NY; ²NYCHHC-Coney Island Hospital, Brooklyn, NY; ³St. George's University School of Medicine, Brooklyn, NY.



[2793] Figure 1. Kaplan Meier time-to-development of Hepatic decompensation in patients with PBC stratified by Gender.

 ${\scriptsize [2793]}$ Table 2. Degree of fibrosis in males and females at the time of diagnosis

Degree of fibrosis at time of diagnosis	Females (172)	Males (26)	
F0-F1	107 (62%)	10 (38%)	
F2	38 (22%)	8 (31%)	
F3	15 (9%)	2 (8%)	
F4	12 (7%)	6 (23%)	

[2794] Table 1.

Subtotal Cholecystectomy - 107		N	Mean	P- Value	
Total output of JP drain (mL)	Fenestrated	96	367.75	0.000	
	Reconstituting	11	143.64	0.002	
Total Duration of	Fenestrated	96	9.16	0.007	
JP drain (Days)	Reconstituting	11	5.36	0.007	
Age	Fenestrated	96	55.95		
	Reconstituting	11	52.00	0.563	
WBC	Fenestrated	96	12.040	0.011	
	Reconstituting	11	8.682		
ALP	Fenestrated	96	112.03	0.432	
	Reconstituting	11	134.00		
Total Bilirubin	Fenestrated	96	1.042	0.927	
	Reconstituting	11	1.064		
AST	Fenestrated	96	46.02	0.843	
	Reconstituting	11	49.27		
ALT	Fenestrated	96	57.81	0.077	
	Reconstituting	11	50.73	0.675	
Days to surgery	Fenestrated	96	3.00	0.440	
	Reconstituting	11	2.36		
Days of	Fenestrated	96	5.82	0.781	
hospitalization	Reconstituting	11	5.55		
Cystic Duct				0.00	
	rotomy + Stent)			0.35	

[2794] Table 2.

ERCP (Y/N)		N	Mean	P-Value
Total output of JP drain (mL)	Υ	34	711.79	0.000
	N	73	173.74	0.000
Total Duration of	Υ	34	11.82	0.042
JP drain (Days)	N	73	7.34	0.013
Age	Y	34	57.06	0.504
	N	73	54.84	0.534
WBC	Υ	34	11.018	
	N	73	12.010	0.318
ALP	Y	34	129.41	0.158
	N	73	107.25	
Total Bilirubin	Υ	34	1.382	0.007
	N	73	0.886	
AST	Υ	34	60.15	0.174
	N	73	39.93	
ALT	Υ	34	67.35	0.392
	N	73	52.30	
Days of hospitalization	Υ	34	8.35	
	N	73	4.60	0.001

INTRODUCTION: Subtotal cholecystectomies have become a viable alternative to converting laparoscopic cholecystectomies to open cholecystectomies in complicated gallbladder etiologies. There are two subtypes of subtotal cholecystectomies: fenestrating and reconstituting. Fenestrating subtotal cholecystectomy requires an internal suture of the cystic duct with removal of most of the gallbladder. Reconstituting subtotal cholecystectomy creates a gallbladder remnant. Bile leak is a common adverse outcome of subtotal cholecystectomies. ERCP is the standard intervention for high output bile leaks.

METHODS: This was a retrospective analysis of patients at Coney Island Hospital who underwent any cholecystectomy during January 2010 to December 2018. The inclusion criterion was patients who underwent subtotal cholecystectomy. The exclusion criteria was any patient who underwent prior ERCP or sphincterotomy. We reviewed patient's age, initial WBC, alkaline phosphatase, total