SUBMITTED, NOT PRESENTED: BILIARY/PANCREAS

EUS-Guided Cyst-Enterostomy Using a Self-Expanding Metal Stent Is a More Cost-Eff ective Strategy for the Treatment of Pancreatic Fluid Collections

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Introduction: EUS-guided cyst-enterostomy (EUS-CE) has become the mainstay for endoscopic treat- ment of symptomatic pancreatic fluid collections (PFCs). The traditional approach (Approach I) of inserting multiple double-pigtail plastic stents with sequential dilation of the tract with or without naso-cystic irrigation is successful but requires repeated endoscopic intervention. The comparative effectiveness of newer approaches utilizing a fully covered expandable metal stent (FCEMS, Approach II) is not ness of newer approaches utilizing a fully covered expandable metal stent (FCEMS, Approach II) is not.

Methods: Eleven patients had EUS with FNA with SharkCore Fine Needle BiopsyTM (Medtronic) from July 2015 to November 2015 at our institution. Data were collected regarding procedure indication, needle size, number of passes, diagnostic success, and complications. The average patient age was 52 years; five patients were male and six were female.

Results: All FNAs were technically successful. Six of the 11 patients had pancreatic masses or lesions, and the remaining five patients had various indications including one patient with mediastinal mass, two with submucosal masses, one with paraseptal lymphadenopathy, and one with abdominal lymphadenopathy. A 22-gauge needle was used in 10 of the 11 patients, and a 25-gauge needle was used in the remaining patient, with an average of 3.6 passes. Nine of the 11 FNAs were diagnostic. Diagnoses ranged from acute inflammatory lung mass to pancreatic pseudopapillary neoplasm to spindle cell lesion. There were no known peri-procedural complications (Table).

Conclusion: EUS-FNA with SharkCore Fine Needle BiopsyTM is technically feasible and safe in our initial experience.

Table 1. Diagnostic Yield

<table>
<thead>
<tr>
<th>Patient</th>
<th>Age (years)</th>
<th>Gender (M/F)</th>
<th>Indication</th>
<th>Needle Size (gauges)</th>
<th>Passes (number)</th>
<th>Complications</th>
<th>Diagnostic Yield (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19</td>
<td>M</td>
<td>Medulloblastoma</td>
<td>22</td>
<td>2</td>
<td>None</td>
<td>Y</td>
</tr>
<tr>
<td>2</td>
<td>58</td>
<td>M</td>
<td>Pancreatic head mass</td>
<td>22</td>
<td>5</td>
<td>None</td>
<td>Y</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>F</td>
<td>Enlarged paraseptal lymph nodes</td>
<td>22</td>
<td>5</td>
<td>None</td>
<td>N</td>
</tr>
<tr>
<td>4</td>
<td>56</td>
<td>M</td>
<td>Submucosal mass</td>
<td>22</td>
<td>5</td>
<td>None</td>
<td>Y</td>
</tr>
<tr>
<td>5</td>
<td>75</td>
<td>F</td>
<td>Pancreatic head mass</td>
<td>22</td>
<td>3</td>
<td>None</td>
<td>Y</td>
</tr>
<tr>
<td>6</td>
<td>30</td>
<td>F</td>
<td>Pancreatic tail mass</td>
<td>22</td>
<td>4</td>
<td>None</td>
<td>Y</td>
</tr>
<tr>
<td>7</td>
<td>73</td>
<td>M</td>
<td>Gastric submucosal tumor</td>
<td>22</td>
<td>3</td>
<td>None</td>
<td>Y</td>
</tr>
<tr>
<td>8</td>
<td>57</td>
<td>F</td>
<td>Abdominal lymphadenopathy, adrenal nodules, pancreatic lesion</td>
<td>22</td>
<td>3</td>
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<td>Y</td>
</tr>
<tr>
<td>9</td>
<td>67</td>
<td>M</td>
<td>Pancreatic and mesoenteric soft tissue densities</td>
<td>22</td>
<td>5</td>
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<td>Y</td>
</tr>
<tr>
<td>10</td>
<td>58</td>
<td>F</td>
<td>Pancreatic mass</td>
<td>25</td>
<td>4</td>
<td>None</td>
<td>N</td>
</tr>
<tr>
<td>11</td>
<td>64</td>
<td>F</td>
<td>Pancreatic lesion</td>
<td>22</td>
<td>1</td>
<td>None</td>
<td>Y</td>
</tr>
<tr>
<td>Mean</td>
<td>52</td>
<td>5 male, 6 female</td>
<td></td>
<td>22</td>
<td>3.6</td>
<td>82% diagnostic</td>
<td></td>
</tr>
</tbody>
</table>

Conclusion: Despite the increased upfront cost of a metal stent, the use of a FCEMS for EUS-CE in the treatment of PFCs is effective, safe and results in significant overall cost savings by reducing the number of endoscopic re-interventions and HLOS.

Osteoporosis and Fracture Risk in Chronic Pancreatitis Patients

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Introduction: Chronic pancreatitis is well-known to lead to fat malabsorption and ultimately malabsorption of the fat-soluble vitamins, namely A, D, E, and K. It is unclear, however, if this vitamin...
malabsorption increases the risk for osteoporosis and fractures. This study examined the risk of fractures and osteoporosis in chronic pancreatitis patients with known exocrine insufficiency.

Methods: Patients with chronic pancreatitis and exocrine insufficiency (previously diagnosed with endoscopic ultrasound and pancreatic function testing) underwent Dual-energy X-ray absorptiometry (DEXA) scans to evaluate for osteoporosis and had a FRAX® score calculated to assess their fracture risk. Nutritional status was also measured using the Mala-nutrition Universal Screening Tool (MUST).

Results: 12.5% (2/16) of the patients from our chronic pancreatitis clinic were found to have osteoporosis and 68.8% (11/16) were found to have osteopenia based on DEXA scans. Based on the FRAX® score, the average 10-year major osteoporotic fracture risk was 55.8 ± 2.9% and the average 10-year hip fracture risk was 1.4 ± 2.9%. There was no significant correlation with level of malabsorption based on the MUST score with T scores (r=0.11, p < 0.74) or FRAX® scores (r=0.49, p < 0.13 for major osteoporotic fracture risk and r=0.29, p < 0.38 for hip fracture risk). See Figure 1.

Conclusion: There was no significant correlation with nutritional status and osteoporosis or fracture risk. This likely reflects the multi-faceted nature of osteoporosis and emphasizes that malabsorption remains a theoretical risk factor for decreased bone mineral density. A recent case-match study demonstrated an association between abnormal bone turnover and decreased bone mineral density in chronic pancreatitis patients, but what remains unclear is if this process is secondary to malabsorption or inflammation.

While further studies will need to be conducted to establish the link between malabsorption and decreased bone mineral density, this study highlights the importance in screening for osteoporosis and osteoporosis in this population.

Risk of Failure and Complications of ERCP: Comparison of Elderly and Young Pakistani Patients

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Introduction: Endoscopic Retrograde Cholangiopancreatography (ERCP) is an effective diagnostic and therapeutic procedure, widely performed in patients, irrespective of age. The objective of the study was to compare the risk of failure and procedural complications in young and elderly patients.

Methods: This cohort study was conducted at Holy Family Hospital, where all 362 patients who underwent the therapeutic or diagnostic ERCP performed, in the year 2014 were included and categorized as 276 young (aged 20-59 years) and 86 elderly (60 years and above) patients. The procedural and post-procedural records of both study groups were followed up prospectively to compare the risk of failure of procedure and the complications during and after procedure. Chi square test was applied at 5% level of significance and Relative risks (RR) along with 95% confidence intervals (CI) were also determined through SPSS.

Results: Successful therapeutic intended procedures were observed in 95.08% of elderly and 97.32% of young patients. (RR of failure 0.64, CI 0.19-2.85, p value 0.47). Similarly Successful diagnostic intended procedures were performed in 88% of elderly and 91.1% of young patients. (RR of failure 1.35, CI 0.37-4.84, p value 0.64). At least one or more procedural and post procedural complications were observed in 9.3% and 8.3% of elderly and young patients respectively (p value 0.77), where risk of complications was also observed to be the same with relative risk of 1.11 (CI 0.51-2.40).

Conclusion: The success rates, risk of failure and complications of the procedure in elderly was same as that of young, providing evidence that it is an equally safe procedure for elderly too.

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The Role of Real-Time Endoscopic Ultrasound Guided Elastography for Targeting EUS-FNA of Suspicious Pancreatic Masses: A Review of the Literature and a Single Center Experience


Introduction: Endoscopic ultrasound guided elastography is an imaging modality that can be used to evaluate tissue stiffness and to assess solid pancreatic lesions. It can also assist in optimizing the diagnostic yield of endoscopic ultrasound guided fine needle aspiration biopsies.

Methods: We present a review of the literature and a single center experience describing the use of EUS guided elastography in directing fine needle aspiration biopsies of solid pancreatic lesions.

Results: Thirteen male veterans with an average age of 62.3 (SD: ± 13.8) years were enrolled in the study. The mean pancreatic mass size on EUS was 5.1 x 5.2 (SD: ± 4.4 x 4.5) cm. A total of 13 lesions were identified during elastography. The lesions were most commonly found in the body (n=5), followed by multilobal lesions (n=4), pancreatic head (n=3) and tail (n=1). The seven concerning pancreatic lesions were stratified based on color pattern identified on EUS and EUS-elastography. Three lesions were homogeneously blue and four lesions were heterogeneously blue. The remaining six lesions which were less concerning were predominantly green. Of the three lesions, that were homogeneously blue, two were diagnosed as adenocarcinoma (n=2) and chronic pancreatitis (n=1) respectively. Of the four heterogeneously blue lesions two were adenocarcinomas, while the other two represented a large B-cell lymphoma and chronic pancreatitis. Patients whose lesions were characterized as homogenous or heterogeneous green were benign and remained disease free after a median of two years of regular follow up.

Conclusion: In our single center experience we found that the use of real time endoscopic ultrasound guided elastography for targeting FNA of suspicious pancreatic lesions may be beneficial as an adjunct modality to complement conventional EUS. Larger prospective studies need to be conducted to evaluate the utility of this modality in targeting pancreatic lesions.

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Outcomes Among Overweight and Obese Patients with Pancreatitis: Analysis of the National Inpatient Sample

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Introduction: Obesity is associated with various comorbidities, including the possibility of worse outcomes in acute pancreatitis. However, little is known about the changing epidemiologic profile of obese and overweight individuals in regards to acute and chronic pancreatitis. The aim of this study is to determine national inpatient trends and demographic variation among obese and overweight patients with the diagnosis of acute and chronic pancreatitis.

Methods: We analyzed the National Inpatient Sample (NIS) database for all subjects in whom the primary diagnosis was acute and chronic pancreatitis (ICD 9 Code: 577.0 and 577.1) during the period from 2001-2011. Patients with the secondary diagnosis of obesity ( morbid obesity, ICD 9 code: 278.01, obesity unspecified, ICD 9 code: 278.00) and overweight (ICD 9 Code: 278.02) were identified. Demographic variables were assessed. The primary outcome measured was in-hospital mortality.

Results: There were a total of 239944 admissions among obese and overweight patients with primary diagnosis of acute or chronic pancreatitis during the study period. In 2001, there were 9804 admissions with pancreatitis, and in 2011, the number of admissions increased to 39596 (p < 0.0001) (Table 1). 32.10% patients were between the ages of 35-49 years, and 30.41% were between the ages of 50-64 years (Image 1). Females comprised 57.87% of the population and this trend of female predominance was seen across obese, morbidly obese and overweight patients (Image 1). 52.17% population was Caucasian.
Predisposing Factors Associated with Post Cholecystectomy Bile Leak
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Introduction: Post cholecystectomy bile leak is an uncommon occurrence, but can have significant consequences. Surgical management has shown to have high morbidity and mortality. Endoscopic management via ERCP with sphincterotomy and biliary stent placement has become the mainstay of therapy at this time. To date, little has been described regarding predisposing factors that can lead to a post-operative bile leak. The aim of this study was to assess post cholecystectomy bile leak and determine if there are predisposing factors associated with them.

Methods: This retrospective study evaluated patients who underwent cholecystectomy and were found to have a post cholecystectomy bile leak that was treated with ERCP with sphincterotomy and stent placement done at our single center institute. Data from the ERCP cholangiogram was reviewed and included in the data set, including biliary ductal dilatation, stones or sludge in the biliary tract, biliary stenosis, papillary stenosis, duodenal diverticulum, and duct of Luschka.

Results: Thirty one patients (17 females, average age 48 ± 13.3) with post cholecystectomy bile leak followed by an ERCP were identified from July 2011 to June 2016. Eighteen of the thirty two (56%) patients had at least one of the findings above. Six patients had stones, one additional patient had sludge but no stones, 3 patients had duodenal diverticulum, 1 with biliary stricture, 2 with papillary stenosis, and 6 with a duct of Luschka. Only 6 of these patients had a dilated CBD, 3 associated with stones, 2 with duodenal diverticulum, and 1 without any other obstructive findings.

Conclusion: Post cholecystectomy bile leak is an uncommon occurrence, but often (56% of the time) it is accompanied by a predisposing factor. Retained stones and stenosis is the most common cause in our small study followed by a duct of Luschka, and duodenal diverticulum. Care should be taken preoperatively to make sure there are no bile duct stones, sludge, or unexplained dilated common bile duct. Further larger studies are needed to assess the utility of pre surgical imaging as well as better describe predisposing factors.

A New Look to Understanding the Autonomic Innervation of the Digestive Tract: The Novel Concept of a Neural Plexus Freeway and Its Clinical and Physiological Significance
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Introduction: We originally described in the literature that neural fibers jump the duodeno-pancreatic cleft (plexus (PCP) in human cadavers. The DPcPC was explored in rats, dogs, and opossum, and it allowed us to elaborate a “neural plexual freeway” (NPF).

Results: Crowning fifty decades of clinical and experimental research allowed us to elaborate the present hypothesis, one that describes the exquisite modulation of the autonomic nervous system over the pancreas. Histochemistry analyses at different levels by optical microscopy allowed us to elaborate a “neural plexual freeway” (NPF).

Conclusion: The neural plexus freeway is the epicenter of our NPF, induces a remarkable change, that of an enhanced insulin sensitivity. The latter plays a well-documented, critical role in obesity and metabolic syndrome.

Pancreatic Carcinoma: Still a Gloomy Reality
Rui Gaspar, MD, Pedro Mouinho-Ribeiro, MD, Patrícia Andrade, MD, Rosalía Corêlo, MD, Marco Silva, MD, Armando Peixoto, MD, Rodrigo Liberal, MD, Rui Morais, MD, Ana Santos, MD, Pedro Costa-Moreira, MD, Guilherme Macedo, MD, PhD, FACG, FASEB, FAASLD, AGAF. 1. Centro Hospitalar de São João, Porto, Portugal, 2. Centro Hospitalar de São João, Porto, Portugal.

Introduction: Pancreatic carcinoma is the fourth leading cause of cancer deaths. In most patients diagnosis is late and, consequently, it has a poor prognosis. This study aimed to identify the risk factors,
Percutaneous Drainage of Malignant Biliary Obstruction: Clinical Outcomes

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Introduction: Percutaneous transhepatic biliary drain is an intervention used to relieve malignant biliary obstruction. Most of the times, patients are at an advanced stage of cancer and may not live long enough to get benefit from this invasive procedure.

Method: We conducted a retrospective analysis of 72 patients who had malignant biliary obstruction and received percutaneous biliary drain at the interventional radiology department during the time period between March 2005 and February 2015. The analysis included survival rates using Kaplan Meier estimates. Clinical factors associated with short term survival after biliary drain insertion were assessed. After literature review, the following factors were selected for analysis: presence of ascites, pleural effusion, liver metastasis, serum creatinine level, serum bilirubin, international normalized ratio, and serum albumin level. Cox proportional hazards model was used to test for multivariate analysis.

Results: Median patients' age was 56 years. 38(52.7%) were males, 34(47.2%) were females. Median survival post biliary drain insertion was 46 days, 95% CI (37-54.02), range (2-453 days). Multivariate analysis by Cox proportional hazards regression model showed presence of ascites to be a significant predictor of survival, other factors analyzed did not show statistical significance. Median total bilirubin level before the intervention was 15.01 mg/dl, median total bilirubin level after the intervention was 6.4 mg/dl, P-value <0.05. Patients who survived less than 30 days (group 1) had statistically significant different total bilirubin level before and after the intervention, 17.5 mg/dl and 5.8 mg/dl respectively, P value < 0.05. Conclusion: Patients who survived more than 30 days (group 2) had statistically significant different total bilirubin level before and after the intervention, 14.5 mg/dl and 5.8 mg/dl respectively, P value <0.05. Mann-Whitney test was used to compare group 1 and group 2 in terms of difference in serum bilirubin level after biliary drainage, no statistically significant difference was found.

Table 2. Multivariate Survival Analysis of Clinical Factors Using Cox Proportional Hazards Model

<table>
<thead>
<tr>
<th>Clinical Factor</th>
<th>Hazard Ratio</th>
<th>Confidence Interval</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>INR</td>
<td>0.281</td>
<td>0.090-0.879</td>
<td>0.029</td>
</tr>
<tr>
<td>Serum Albumin</td>
<td>1.081</td>
<td>0.665-1.758</td>
<td>0.754</td>
</tr>
<tr>
<td>Serum Creatinine</td>
<td>1.347</td>
<td>0.993-1.826</td>
<td>0.056</td>
</tr>
<tr>
<td>Presence of Ascites</td>
<td>0.462</td>
<td>0.260-0.820</td>
<td>0.008</td>
</tr>
<tr>
<td>Presence of Pleural Effusion</td>
<td>1.519</td>
<td>0.811-2.844</td>
<td>0.192</td>
</tr>
<tr>
<td>Liver Metastasis</td>
<td>0.770</td>
<td>0.437-1.395</td>
<td>0.365</td>
</tr>
<tr>
<td>Serum Total Bilirubin</td>
<td>1.016</td>
<td>0.983-1.050</td>
<td>0.345</td>
</tr>
</tbody>
</table>

Survival Function

[2373A] Figure 1.
Pancratic Necrosis: A Single Center Epidemiologic Description

Introduction: Pancreatic necrosis is a complication of acute pancreatitis which results in the formation of walled-off collections that may contain both solid debris and liquid elements. Necrotic collections have a tendency to get infected and can cause other major complications including abdominal pain, mass effect resulting in gastric outlet or biliary obstruction, pseudo aneurysms or septic shock. This study analyzes the epidemiology of patients suffering from pancreatic necrosis and the characteristics of the necrotic cavity.

### Methods
This study was a retrospective review of 85 patients who were treated for pancreatic necrosis at our institution over a five year period (December 2010 – October 2015). We collected epidemiologic data pertaining to these patients, the severity of their episode of acute pancreatitis, clinical features as well as details regarding the necrotic cavity.

### Results
The mean age of patients treated for pancreatic necrosis at our institution was 53.7 ± 15 years. 72% of them were males and 84% were Caucasians. Median scores for the Charlson comorbidity index and the Bedside Severity of Index in Acute Pancreatitis (BISAP) were 2 for both. Most common cause of acute pancreatitis preceding pancreatic necrosis was gallstone disease (33%) followed by alcohol-induced pancreatitis (30%). (Table 1) Mean dimensions of the necrotic cavity were 79.4 mm × 67.5 mm × 91.3 mm. Most necrotic collections were observed to involve the majority of the pancreas (45%), however only 27% of patients were found to be bacteremic. (Table 2).

### Conclusion
Pancreatic necrosis is a known and serious complication of acute pancreatitis. Amongst all causes of acute pancreatitis, gallstone pancreatitis was associated with a higher rate of complicating into pancreatic necrosis. Although infected pancreatic necrosis is an indication for debridement, not all infected cysts result in peripheral bacterial seeding and sepsis. Hence, not all infected cysts may need debridement and further studies are needed to establish which patients may benefit from any kind of intervention versus just conservative management.

### 2374

#### Table 1: Characteristics of the necrotic cavity (n=85)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean dimensions of necrotic cavity</td>
<td>79.4 × 67.5 × 91.3</td>
</tr>
</tbody>
</table>

### Figure 1

#### Figure 1

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### 2375

#### Table 2: Characteristics of the necrotic cavity (n=85)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of necrotic cavity</td>
<td>Head 15.3, Neck 2.4, Body 32.9, Tail 4.7, Generalized 44.7</td>
</tr>
<tr>
<td>Peripancreatic necrosis (%)</td>
<td>78.8</td>
</tr>
<tr>
<td>Extension to paracolic gutters (%)</td>
<td>15.3</td>
</tr>
<tr>
<td>Infected necrotic collections (%)</td>
<td>50.6</td>
</tr>
</tbody>
</table>

#### Figure 2

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### 2376

#### Evaluation of Patients with Sphincter of Oddi Dysfunction and Correlation with Non Invasive Investigations

### Introduction
Sphincter of Oddi dysfunction (SODD) is a syndrome of non calculous obstruction of the flow of bile and pancreatic juices causing pain, abnormal LFTs and pancreatitis. The cause of SODD dysfunction is not clearly understood. We looked at our data of patients who had biliary manometry from 2004-2012 in a tertiary hepatobiliary centre to analyse if we could accurately predict the diagnosis of SOD dysfunction based on history and non invasive investigations.

#### Methods
We did a Retrospective analysis of all the patients who had biliary manometry between 2004 to 2012 and were confirmed to have Sphincter of oddi dysfunction on measurements of pressures. Data was identified by GI physiology department and a total of 37 patients were included.

#### Results
Most of the patients in our data were of younger age with mean age of 46. As show in previous studies, majority (n=35/36) were female. The duration of the symptoms varied with most (n=16) having symptoms longer than 5 years. Almost all of them (n=28) had cholecystectomy in the past. Twenty Five Patients were non smoker with all of them denying alcohol abuse of more 18 units per week. Only 8 patients had previous history of mental health disorders. Surprisingly almost all of them had previous episode of pancreatitis and were diabetic. Almost half were on chronic opiates even prior to the diagnosis of SOD dysfunction. With regards to the LFTs none of them had remarkably abnormal liver function test but all of them had gallstones. 47% had confirmed biliary dilatation on imaging.

#### Conclusion
In our cohort of patients most of the patients with confirmed SOD dysfunction on manometry had history of gallstone disease presumably causing pancreatitis and leading to cholecystectomy. We found a high prevalence of diabetes in these patients although we did not look into if they had developed chronic pancreatitis leading to diabetes. The prevalence of opiate use was also quite high which is a known cause of dilated CBD in itself. SODD dysfunction is not an uncommon condition in clinical practice and although its classified in the ROME III criteria of functional syndrome, it does lead to significant comorbidity and in some cases leads to unnecessary cholecystectomy. Furthermore biliary manometry and subsequently ERCP leads to a higher percentage of people developing pancreatitis. We were unable to identify a working equation to accurately predict the diagnosis of SOD dysfunction based on non invasive investigations.
comparing APACHE II scores, the endoscopy and surgery groups were similar, with comparable average scores (9.92 vs 10.90; p=.314). All comparisons with the percutaneous group were included but no significance was reported given the small group size.

Conclusion: This study supports an emphasis on early endoscopic interventions, as they are less likely to require further procedures, less likely to develop complications, and less likely to have prolonged hospital stays. This reinforces recent trends toward endoscopy as preferred intervention, while it conflicts with a local preference for surgical intervention. Our single center experience shows the benefit of outcomes analysis and should motivate other regional centers to review their own data and promote evidence based practices across the US.

Diagonal Antral Band in Rats: Upper Center of the Neural Plexual Freeway
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Introduction: While exploring rat abdominal cavity, it called to attention an omitted and not formally described anatomical finding on both sides of the stomach.

Methods: The overlooked anatomic finding induced us to attempt to elucidate its nature. To that aim, 100 anesthetized Wistar rats (150-600g) were studied with the help of a dissecting microscope. A connective nervous structure extending from the antral-fundus-junction (AFJ) up to the pylorus was consistently found. At the AFJ, the myenteric plexus reaches its maximal expression. By histochemical analysis, the longitudinal neuron number is significantly greater than in other intersections, such as fundus-rumen and antro-pylorus. A significantly important and unexpected fact is that its section and re-anastomosis elicits a typical peptic ulcer at the center of the antrum.

Results: The analysis of the region confirms the observation of neural fibers entering and leaving the diagonal antral band (DAB) (Fig 1). Running over the 2nd curtain - the deep lamina that fills the hepato-duodenal space - the right hepatic nerve connects with the hepatic anterior plexus. A branch of the left anterior vagal trunk joins in. In addition, neural fibers linked to the DAB fuse with gastric collaterals of the vagal trunks. Autonomic arc reflexes (AAR), which are set off by distention of the fundus-antral segment, increase the exocrine pancreatic secretion. At the
pyloruses and gastro-duodenal junction, neural fibers leave gastric autonomic innervations, jump to the 1stupper segment of our proposed neural plexus freeway(NPF), and enter into the 2ndone that comprises also of a NPF with PVR

**Introduction:** Nectrotizing pancreatitis is a severe and sometimes fatal complication of acute pancreatitis causing high morbidity and mortality. Our aim was to assess the difference in Length of Stay (LOS), first intervention LOS and numbers of procedures according to primary diagnoses, surgery status and etiology. We also assessed the relationship between primary diagnoses, surgery status and the categorical outcomes of infection, diabetes, bleeding, hernias, pancreatic enzyme use, fistulas, hemorrhage, admission to the ICU and multiple admissions.

**Methods:** We analyzed all pancreatic pseudocyst and walled-off pancreatic necrosis patients who were admitted to our institution between November 2009 and October 2015. Due to a small sample size, we performed separate analyses for each of the two diagnoses. Chi Square/Fisher's exact statistical testing were used to analyze results.

**Results:** During the study period, 15 and 11 patients were admitted for pancreatic pseudocyst and walled-off pancreatic necrosis, respectively. The age mean for our study population was 50.31 years (13-74) with 58% male patients. Patients' etiologies included alcohol (33.33%), gallstones (61.91%), and hypertriglyceridemia (4.76%). The number of infected patients was 11 (42.31%), while 19.23% of all patients experienced bleeding. A small number of patients had fistulas (n=3), diabetes (n=3), hemorrhage, admission to the ICU and multiple admissions.

**Conclusion:** Nectrotizing pancreatitis was statistically different in relation to etiology (Chi Square P=0.026) (Fisher's Exact P=0.026). The mean initial LOS was 13 days higher among those with walled-off pancreatic necrosis, the mean initial LOS was 13 days higher among those with walled-off pancreatic necrosis primary diagnosis (Chi Square P=0.030) and (Fisher's Exact Test P=0.081). The status of pancreatic enzyme use was statistically different in relation to etiology (Chi Square P=0.026) (Fisher's Exact Test P=0.026). Infections were higher among patients with walled-off pancreatic necrosis (34.62%, P=0.051).

**Conclusion:** This data will help in understanding the dynamics of a regional patient population as well as the performance of specific medical centers.

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**Diagnostic Accuracy of Computed Tomography Scan Keeping Endoscopic Ultrasound for Detection of Pancreatic Carcinoma**

**Introduction:** Endoscopic Ultrasound (EUS) and Computed Tomography (CT) scan are diagnostic techniques that are considerably important in preoperative diagnosis of pancreatic carcinoma (CA). Even though EUS has been confirmed to be more effective in accurate diagnosis but CT scan is still used commonly being easily accessible, cost effective and non invasive in most of developing countries. The objective of this study was to determine the diagnostic accuracy of CT scan findings keeping EUS as the Gold Standard procedure.

**Methods:** METHODS & MATERIALS: This cross sectional study was conducted at the Liver cen-

tre of Holy Family Hospital, where all 75 suspected cases of pancreatic C.A. patients who underwent both; Computed Tomography and EUS, each diagnostic procedure performed by same team of radiologists and gastroenterologists respectively, in the year 2014 were included. The diagnosis of each individual patient for carcinoma of pancreas, confirmed through EUS was taken as gold standard. Sensitivity, Specificity, Positive and Negative predictive values along with 95% confidence intervals (CI) were calculated. Diagnostic accuracy of CT scan compared to EUS was thereby calculated.

**Results:** Sensitivity and Specificity of CT scan was found to be 97.14% (CI=85.08%-99.39%) and 95% (CI=83.08%-99.39%). The positive predictive value was calculated as 94.44% (CI=87.74%-98.32%), while negative predictive value was 97.44% (CI=86.52%-99.44%). Diagnostic accuracy was 96%.

**Conclusion:** The diagnostic capability of CT Scan in diagnosis of pancreatic CA is almost evenly effective to EUS.