Acute Pancreatitis

S0061

Sarcopenia Assessed by Psoas Muscle Index Predicts Pseudocyst Development in Patients With Acute Pancreatitis

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INTRODUCTION: Sarcopenia can be assessed by skeletal muscle depletion and is a marker for frailty that predicts prognosis in multiple diseases. However, its utility in prognosticating patients with acute pancreatitis has not been assessed.

METHODS: A retrospective cohort study including patients with acute pancreatitis who underwent IRB approval at our tertiary care university hospital. Adult patients with index episode of acute pancreatitis were included. Sarcopenia was assessed with psoas muscle index measured on the computed tomography scan at index pancreatitis episode normalized for height and gender. Clinical outcomes including development of severe pancreatitis, walled necrosis, presentation with pseudocyst at follow up were compared. Analyses were conducted using Chi square, Fisher Exact, and T tests.

RESULTS: A total of 217 patients were included. Mean age of participants was 44.99 years (SD: 10.26). Most patients underwent more than one biopsy type had the greatest LOS. This may represent considerations of at least three more days compared to those with percutaneous and endoscopic biopsies. Those who underwent more than one biopsy type had the greatest LOS. This may represent considerations of at least three more days compared to those with percutaneous and endoscopic biopsies. Those who underwent more than one biopsy type had the greatest LOS.

CONCLUSION: The LOS for patients diagnosed with pancreatic cancer who underwent different biopsy types was significantly different. Patients who underwent an endoscopic biopsy have the shortest LOS compared to those who underwent a percutaneous biopsy, surgical biopsy, or a combination of the three by at least one day. Patients who underwent surgical biopsies stayed an average of at least three more days compared to those with percutaneous and endoscopic biopsies. Those who underwent more than one biopsy type had the greatest LOS. This may represent considerations physicians must take when deciding between different diagnostic options available.

S0062

Do Differences in the Length of Hospital Stay Exist Between Patients Diagnosed With Pancreatic Cancer by Percutaneous, Endoscopic, or Surgical Biopsy?

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INTRODUCTION: Pancreatic cancer is the fourth leading cause of death by cancer in the United States. Typical presentation includes non-specific symptoms such as jaundice, epigastric pain, and weight loss. These symptoms have a poor positive predictive value for detecting pancreatic cancer. If ultrasound and computer tomography allow visualization of a resectable pancreatic mass, the next step is surgical intervention. However, when there is insufficient evidence, a biopsy is performed either percutaneously, endoscopically, or surgically. We hypothesize that a patient’s hospital length of stay (LOS) is different depending on the method of biopsy.

METHODS: A retrospective analysis of the National Inpatient Sample 2001–2013 database was conducted. Patients with a diagnosis of pancreatic cancer of all locations and types were extracted using the International Classification of Disease, Ninth Revision (ICD-9) codes. Codes for endoscopic or percutaneous fine-needle aspiration and open surgical biopsy of the pancreas were identified using ICD-9 procedural codes. A one-way analysis of variance (ANOVA) test was used to compare the means for the length of stay in the different biopsy methods, with a significance of P < 0.001.

RESULTS: The total number of patients in our study population was 64,566. There were 3,407 patients who received endoscopic biopsies, 49,230 patients who received percutaneous biopsies, 11,208 patients who received surgical biopsies, and 1012 patients who received a combination of the three. The mean (M) length of stay and standard deviations for endoscopic biopsies were: M = 8.61, SD = 5.46, for percutaneous biopsies M = 9.20, SD = 7.92, for surgical biopsies M = 12.81, SD = 10.36, and for a combination of the biopsies M = 14.77, SD = 9.63. The ANOVA was significant with a P < 0.001.

CONCLUSION: The LOS for patients diagnosed with pancreatic cancer who underwent different biopsy types was significantly different. Patients who underwent an endoscopic biopsy have the shortest LOS compared to those who underwent a percutaneous biopsy, surgical biopsy, or a combination of the three by at least one day. Patients who underwent surgical biopsies stayed an average of at least three more days compared to those with percutaneous and endoscopic biopsies. Those who underwent more than one biopsy type had the greatest LOS.

[Table 1. Average Length of Stays for Endoscopic, Percutaneous, and Surgical Biopsy Patients]

<table>
<thead>
<tr>
<th>Biopsy Type</th>
<th>N</th>
<th>Mean (95% CI)</th>
<th>Std Dev (Std. Dev)</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endoscopic</td>
<td>3,897</td>
<td>8.61 (8.34-8.89)</td>
<td>0.26 (0.14)</td>
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<tr>
<td>Percutaneous</td>
<td>11,096</td>
<td>9.21 (9.04-9.38)</td>
<td>0.60 (0.096)</td>
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<tr>
<td>Surgical</td>
<td>50,194</td>
<td>12.82 (12.62-13.02)</td>
<td>10.35 (1.16)</td>
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<tr>
<td>Combination</td>
<td>1,102</td>
<td>14.77 (14.57-15.06)</td>
<td>9.83 (0.30)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>64,566</td>
<td>9.87 (9.80-9.94)</td>
<td>8.57 (0.03)</td>
<td></td>
</tr>
</tbody>
</table>

Statistically significant difference by ANOVA test (P-value < 0.001)