ENDOSCOPIC DRAINAGE OF PANCREATIC PSEUDOCYSTS: A SINGLE-CENTER RETROSPECTIVE REVIEW

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Background:
- Pancreatic pseudocysts are the most common cystic lesion of the pancreas.
- Pseudocysts occur as a complication of acute or chronic pancreatitis.
- 3 forms of therapy available: percutaneous, surgical, and endoscopic drainage.
- Endoscopic drainage may be trans-gastric, trans-enteric, or trans-papillary.
- Endoscopic drainage may be performed via ERCP alone, via ERCP with EUS-assistance, or with EUS-guidance alone.

Methods:
- 13 patients (14 pseudocysts); 14 endoscopic drainage procedures.
- Mean age 49 years (range: 14-73 years).
- Median pseudocyst diameter 81 mm (range: 20-240 mm).
- Indications for drainage: abdominal pain, nausea & vomiting, or biliary obstruction.
- Etiology: acute pancreatitis (8 pts); acute-recurrent pancreatitis (1 pt); chronic pancreatitis (5 pts).
- Pseudocyst drainage technique:
  - Cystoduodenostomy (5 pts); cystgastrostomy (6 pts); trans-papillary (4 pts).
  - ERCP alone (3 pts); ERCP with EUS-assistance (6 pts); EUS-guided alone (5 pts).

Results:

<table>
<thead>
<tr>
<th>Patient</th>
<th>Procedure/Technique</th>
<th>Drainage</th>
<th>Size</th>
<th>EUS-Assistance</th>
<th>Complications</th>
<th>Follow-up</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pt #1</td>
<td>ERCP with EUS-guided Cystoduodenostomy</td>
<td>Large cyst in head of pancreas.</td>
<td>Large cyst in head of pancreas.</td>
<td>Guidewire and double-pigtail cystenterostomy stent in place.</td>
<td>None</td>
<td>40</td>
<td>Complete resolution</td>
</tr>
<tr>
<td>Pt #9</td>
<td>EUS-guided Cystgastrostomy</td>
<td>Large pseudocyst with internal debris.</td>
<td>Large pseudocyst with internal debris.</td>
<td>Two cystenterostomy stents in place.</td>
<td>None</td>
<td>11</td>
<td>Complete resolution</td>
</tr>
</tbody>
</table>

Patient Follow-up:
- Median follow-up 23.3 months (range: 1.5-40).
  * Successful pseudocyst drainage in 12/13 patients (13/14 procedures). Trans-papillary drainage failed in 1 patient due to stent migration.
  * Complete resolution in 9 patients.
  * Partial recurrence of pseudocyst without symptoms in 2 patients. Infection successfully treated with antibiotics in 1 patient.
  * No patient required additional drainage procedures for recurrent pseudocyst.

Conclusion:
- Pancreatic pseudocyst drainage success rates did not differ among the 3 endoscopic techniques.
- Benefit of endoscopic pancreatic pseudocyst drainage was observed in patients over a wide age range (14-72 years) and due to diverse etiologies.
- Endoscopic drainage of pancreatic pseudocysts is safe, minimally invasive, and highly effective.