Post-operative Pancreatic Fistulas: A single institution review of definition relevancy.

**Aim**
- We evaluated data to better understand POPFs and the implications of the current grading system in order to further standardize care and understand patients

**Methods**
- This was a retrospective evaluation of pancreatic resections between 3/1/2016 and 5/1/2021
- Patients for whom complete records were unavailable were excluded
- Diagnosis and grading of POPFs were made in accordance with the updated definitions set forth by the International Study Group of Pancreatic Surgery in 2016

**Results**
- The study included 156 patients, 31 of whom had a clinically relevant POPF (25 Grade B and 6 Grade C)
- The average length of stay among 156 patients included in this study was 10.5 days
- The 25 Grade B POPF patients had an average length of stay of 14.2 days, with a range of 3-32 days
- Average length of stay to change if patients received treatment or combinations of treatments
  - Grade B POPF Patients who had their drain in place for >3 weeks and no other changes in treatment had an average length of stay of 18.5 days
  - Grade B POPF patients who required antibiotic management for infection and somatostatin analogues had an average length of stay of 18.5 days
  - Grade B POPF patients who required TPN had an average length of stay of 22.8 days

**Discussion**
- The Grade B POPF category is exceedingly broad and does not meaningfully stratify patients
- Creating new subcategories for Grade B POPFs would provide more relevant information on the severity of the POPF, thus eliminating some of the ambiguity that currently exists within this population
- Potential subcategories for Grade B POPFs based on this group of patients may include:
  - Patients who required TPN
  - Patients who required a combination of treatments
  - Patients who only had persistent drainage for >3 weeks
- Future research would investigate Grade B POPF by way of more useful subcategories, and implement these subcategories to better assess clinical outcomes

**Selected References**

**Grading a biochemical leak/POPF (Bassi et al. 2016)**
- Drain amylase >3x the serum amylase after POD 3
- Biochemical leak
- Drain left in place for >3 weeks
- Somatostatin analogues
- Drain reposition
- Additional IR/percutaneous drain placement
- Antibiotic management for infection and sepsis without organ failure
- Grade B POPF
- Organ failure
- Reoperation
- Grade C POPF
- Death

**Grade B POPF Treatment Groups and Average Length of Stay**

<table>
<thead>
<tr>
<th>Management Type</th>
<th># of Grade B POPF patients</th>
<th>Average length of stay (days)</th>
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</thead>
<tbody>
<tr>
<td>All Grade B POPF Patients</td>
<td>25 (100%)</td>
<td>14.2</td>
</tr>
<tr>
<td>Drain kept in place &gt;3 weeks</td>
<td>16 (64%)</td>
<td>11.2</td>
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<tr>
<td>Additional drain placement</td>
<td>8 (32%)</td>
<td>14.1</td>
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<td>Antibiotic management</td>
<td>14 (56%)</td>
<td>15.7</td>
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<tr>
<td>Somatostatin analogues</td>
<td>9 (36%)</td>
<td>18.1</td>
</tr>
<tr>
<td>TPN</td>
<td>8 (32%)</td>
<td>22.8</td>
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