Outcome of Pancreatoduodenectomy With Venous Resection and Reconstruction in Locally Advanced Pancreatic Head Cancer

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Introduction

- Pancreatic cancer is the fourth most common cause of cancer death in the United States in 2015. (Siegel et al 2015)
- Approximately 50%-55% of the patients are found to have metastatic disease, 20%-25% have locally advanced disease and only 20% have resectable disease. (Stathis et al 2010)
- The only curative treatment is complete surgical resection, which is limited to those patients without metastatic disease and in whom the entire tumor can be resected with negative surgical margins. (Chandana et al 2007)
- Due to its anatomic position, the SMPV confluence can be involved early without retroperitoneal spread and may represent the only barrier towards a "curative resection". (Howard et al 2003)
- The role of neoadjuvant therapy is to treat micrometastatic disease with chemotherapy, as well as treat local disease with radiation (Auriemma et al 2012)

Aim of the Work

- Assess the outcome of VR and reconstruction during PD in patients with pancreatic head cancer with invasion of SMPV.

Results

This study included 40 patients with LAPC, 23 of them were diagnosed preoperatively with different imaging modalities while the remaining 17 patients were diagnosed as LAPC only intraoperatively

Effect of neoadjuvant treatment on different items

<table>
<thead>
<tr>
<th>Pre neoadjuvant</th>
<th>Post neoadjuvant</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venous contact</td>
<td>15 patients &lt; 180°</td>
<td>17 patients = 180°</td>
</tr>
<tr>
<td>Arterial contact</td>
<td>6 patients &lt; 180°</td>
<td>No arterial contact</td>
</tr>
</tbody>
</table>

I- Pathological Types

<table>
<thead>
<tr>
<th>OS</th>
<th>DFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N 0</td>
<td>72.7%</td>
</tr>
<tr>
<td>N 1</td>
<td>88%</td>
</tr>
</tbody>
</table>

II- LN ratio

<table>
<thead>
<tr>
<th>OS</th>
<th>DFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 0 to 0.1</td>
<td>66.7%</td>
</tr>
<tr>
<td>&gt; 0.1</td>
<td>33.3%</td>
</tr>
</tbody>
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P value = 0.01%

Conclusion

- VR and reconstruction is now increasingly performed, with morbidity, mortality, and survival similar to PD without vascular reconstruction.
- The neoadjuvant chemoradiotherapy should be considered in cases where venous involvement is suspected preoperatively.
- Surgical resection after downstaging of locally advanced pancreatic cancer should be offered to all surgically fit patients without an increased postoperative mortality/morbidity.

References