Role of staging laparoscopy in patients undergoing pancreatoduodenectomy

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INTRODUCTION

Staging laparoscopy helps detecting small volume liver and peritoneal metastatic disease not picked up on standard imaging in patients planned for pancreaticoduodenectomy with curative intent. Identifying this subset of patients can help prevent unnecessary laparotomy, especially with advancement in endoscopic palliation techniques. We aim to evaluate the role of staging laparoscopy in patients undergoing pancreatoduodenectomy for pancreatic / periampullary tumors at our institution.

METHOD

All patients planned for pancreatoduodenectomy who underwent staging laparoscopy between September 2015 and August 2017 were included (n=71). Findings at laparoscopy and whether a change in management plan occurred was recorded.

RESULTS

<table>
<thead>
<tr>
<th>Total Patients</th>
<th>71</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspicious peritoneal or liver disease</td>
<td>13</td>
</tr>
<tr>
<td>Liver disease only</td>
<td>07</td>
</tr>
<tr>
<td>Peritoneal disease only</td>
<td>03</td>
</tr>
<tr>
<td>Both peritoneal and liver disease</td>
<td>03</td>
</tr>
<tr>
<td>Cirrhotic liver</td>
<td>01</td>
</tr>
</tbody>
</table>

Histopathology of Liver Lesions
- Benign: 03
- Malignant: 03
- Neuroendocrine Tumor: 01

Change of Management
- 03 patients were planned for curative resection but liver lesions consistent with metastatic pancreatic carcinoma were found making them irresectable.
- 01 patient had a liver lesion the frozen section of which showed a neuroendocrine tumour thus making him potentially resectable. He underwent Whipple along with wedge resection of liver nodule.
- In 01 patient macronodular cirrhotic liver was observed on laparoscopy which made him unfit for major resection

CONCLUSION

Staging laparoscopy is a useful investigation for patients planned for pancreatoduodenectomy with curative intent as it helps to detect small volume peritoneal and liver metastatic disease. If any liver or peritoneal lesions are encountered, biopsy is useful in differentiating benign lesions from metastatic disease.