One Year Survival of Resectable Pancreatic Adenocarcinoma in Low Volume Centre Teaching Hospital

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ABSTRACT

Background: Pancreatic adenocarcinoma has poor overall prognosis even after radical surgery, although a few patients may achieve 5 or 10-year survival following radical resection. We reported the short-term period survival (1-year survival) of the patients with Pancreatic Adenocarcinoma which had been performed resection in our low volume center. Case report: During 2015, we performed five resections of pancreatic adenocarcinoma (pancreateicoduodenectomy) in our teaching hospital. One patient was male, and the rest were female with the average of age 42 – 64 years old. Pyloric preserving pancreaticoduodenectomy (PPPD) had been done in 2 cases. The average length of stay (LOS) was 10.2 days. We found two postoperative complications, both of them were classified into Clavien-Dindo 2. R0 resection can be achieved in 4 patients; one patient had an R1 resection. All of the patients received postoperative adjuvant chemotherapy with gemcitabine. After one year follow up, four patients have survived with good quality of life and one patient did not survive due to pneumonia. Conclusion: Resection of pancreatic adenocarcinoma can be performed safely in low volume center with attention in a multidisciplinary approach to get the better outcome. Keywords: survival, pancreatic adenocarcinoma, low volume center

1. INTRODUCTION

Pancreatic cancer remains a leading cause of death worldwide and is one of the few cancers associated with increased mortality (1). Resectability remains a matter of debate, particularly where a tumor involves vascular structure(1,2). Pancreatic adenocarcinoma has poor overall prognosis even after radical surgery, although a few patients may achieve 5 or 10-year survival following radical resection. Two Pancreato-duodenectomy was the standard procedure for this case. High hospital mortality and morbidity rates associated with pancreatic surgery impose high demands on patient’s selection and post-operative care (1,3). Centralization of surgical care has been shown to decrease post-operative mortality and morbidity, so the learning curve still must be achieved (3,4). Operative volume was defined according to the annual rate of pancreateoduodenectomy as high volume centers (HVCs; 20 or more resection per year), medium volume centers (MVCs; 6-19 resection) and low volume centers (LVCs; 5 or fewer resection annually)(5). In Indonesia, especially in a teaching hospital, there was lack of data already published, which presented the outcome of resectable pancreatic adenocarcinoma. This report aimed to evaluate the outcome pancreatic adenocarcinoma resection that had been performed in low volume center for one year follow up.
2. CASE REPORT

In 2015, we performed five pancreaticoduodenectomies for pancreatic head adenocarcinoma, all of them were stage II cancer. Pyloric preserving PD was done in 2 patients. Data characteristic of this case report has been shown in table 1 below.

<table>
<thead>
<tr>
<th>Patient</th>
<th>Sex</th>
<th>Age</th>
<th>LOS</th>
<th>Clavien-Dindo</th>
<th>R Status</th>
<th>Pyloric Preserving PD</th>
<th>1y Survival</th>
</tr>
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<tbody>
<tr>
<td>A</td>
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<td>42</td>
<td>7</td>
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<td>+</td>
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<td>+</td>
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<tr>
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<td>12</td>
<td>0</td>
<td>0</td>
<td>-</td>
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</tr>
</tbody>
</table>

3. DISCUSSION

During one-year period in 2015, there were 5 cases pancreatic head adenocarcinoma, the patients came with a history of jaundice and stage II cancer. In our low volume center, we found less than 10% of pancreatic cancer which can be managed with curative resection. Compared with the other high-volume center, the resectability of the pancreatic adenocarcinoma could be 30 – 40% for stage II and III (3,6).

The incidence of pancreatic adenocarcinoma was male predominant and usually be found in the group of age more than 50 years old patients (7). In our report during 2015, four patients were female, all of those cases were stage II and resectable. Most of the male patients came with advanced stage and unresectable case caused by unawareness of them.

Resection of pancreatic cancer remains challenging in achieved radical resection for R0 status. High volume center and centralization of surgical care have been shown to decrease postoperative mortality and morbidity (1,2,8). One of our patients had R1 resection status and correlated with unfavorable outcome. The patient with R1 status cannot survive within one year follow up and has pneumonia-related complication postoperatively.

Delayed gastric emptying as one of complication which can occur after pyloric preserving pancreaticoduodenectomy (PPPD) did not differ compared with standard PD (7,9).

There were early, and late complication can be found during performing pancreaticoduodenectomy, the most common complication was a pancreatic fistula, the other was bleeding, chronic pain delayed gastric emptying, pneumonia, cholangitis, and sepsis postoperative (10). Pain management, nutritional support, early rehabilitation as a multidisciplinary approach correlated with better outcome and prognosis.

4. CONCLUSION

Pancreatic resection can be performed safely for pancreatic adenocarcinoma in low volume center, we must consider about multidisciplinary approach to increasing the outcome and getting more resectable cases for the long-term period.

CONFLICT OF INTEREST
Author and Co-author declare that they have no conflict of interest.

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