

Current role of surgical management of pancreatic ductal adenocarcinoma with metastatic disease

Sohei SATOI, Tomohisa YAMAMOTO, Tatsuma SAKAGUCHI, So YAMAKI, Hisashi KOSAKA, Satoshi HIROOKA, Hironori RYOTA, Yoichi MATSUI

Department of Surgery, Kansai Medical University, Japan

Lecture : There is no international consensus concerning the role of surgical treatment of metastatic pancreatic ductal adenocarcinoma (mPDAC). Shrikande SV et al. have reported that resection of liver and peritoneal metastases could not be generally recommended (Ann Surg Oncol. 2007). However, recent chemotherapy regimen has provided high response rate, resulting in tumor shrinkage even in metastatic disease. Actually, there is an increasing population of highly selected patients with mPDAC who underwent surgical resection. In this review, current role of surgical resection of mPDAC is investigated.

A comprehensive literature search of the PubMed and Cochrane databases was conducted for collecting the data from patients with histologically confirmed mPDAC who underwent surgical resection with a curative intent. We excluded case reports with fewer than five patients, insufficient descriptions of survival data, and palliative or cytoreductive surgery.

This review involved 428 patients who underwent surgical resection for liver metastases (n = 343), lung metastases (n = 57), and peritoneal dissemination (n = 28) from 19 studies. The data indicated substantial survival benefits of conversion surgery for patients with synchronous mPDAC of the liver and peritoneum who responded favorably to initial chemotherapy for a certain period of time (MST of 28-56 months), relative to surgery-first approach (5.3-15.7 months). In patients with metachronous oligometastasis, MST revealed acceptable results ranging from 11 to 31 months in the liver metastasis and 51 to 121 months in the lung metastasis.

In summary, additional surgical resection (conversion surgery) after favorable response to multimodality treatment in patients with m-PDAC seemed to be associated with favorable prognosis. Sustainable efforts are warranted to investigate appropriate regimen for downsizing m-PDAC, optimal timing between initial treatment and surgical resection, and suitable surgical indication.

Corresponding Author. : **Sohei SATOI** (satoi@hirakata.kmu.ac.jp)