

Update in Pancreatic Cancer Surgery – Focus on Total Mesopancreas Excision

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Pancreatic cancer is a disease with a dismal prognosis due to the lack of efficient therapeutical approaches. Resection represents the single hope for long-term survival; however, less than 5% of the resected patients are alive at 5 years. Resection status represents one of the most important prognostic factors after curative-intent surgery (i.e., pancreaticoduodenectomy) for pancreatic head cancer (1). The increased loco-regional recurrence rates (80%) at one year after so-called curative-intent surgery suggest that most of the pancreaticoduodenectomies are not actually curative (2). Achievement of a true R0 (no microscopic residual tumour) resection was associated with a significant improvement of both disease-free and overall survival rates (2). A series of technical modifications of the standard procedure of pancreaticoduodenectomy, addressing the type of resection, have been proposed with the aim to improve the rate of R0 resections. Thus, posterior (3) or superior mesenteric artery first (4) approaches facilitate complete removal of the soft tissue between the superior mesenteric artery

and pancreas (the mesopancreas, containing lymphatic, nervous and vascular structures). The mesopancreas is the primary site for R1 (microscopic residual tumour) resections in pancreatic head adenocarcinoma. The importance of total mesopancreas excision during pancreaticoduodenectomy for pancreatic head cancer was recently highlighted (1). Although previous studies failed to demonstrate an increased rate of R0 resections after posterior approach pancreaticoduodenectomy with total mesopancreas excision (5), Adham and Singhirunusorn reported an increased rate of R0 resections (80.7%), using the same approach (6). This could be an important step to decrease the local recurrence rates, thus hoping to an improvement of long-term survival for these patients.

In conclusion, total mesopancreas excision appears to be a novel and promising surgical procedure for the improvement of prognosis in pancreatic head cancer. However, further studies on larger numbers of patients are mandatory to raise the level of evidence for this approach for surgery of the pancreatic head cancer.

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