Symposium 2

Venous or Arterial Resection for Pancreatic Body Cancer? Is It Worthwhile?

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Most of the patients with pancreatic body cancer tend to be diagnosed in more advanced stages, such as when there is tumor involvement of the celiac axis and of the root of the common hepatic artery. The portal vein resection for pancreatic body cancer seems to be acceptable by many pancreatic surgeons, because this surgical procedure is safe and feasible, and also recognize the clinical benefits in terms of long survival. Indeed, there is no difference of survival curves of pancreatic cancer patients with and without portal vein resection (Yamaue et al. Pancreas 2002, J Surg Oncol 2006, JHBPS 2007). Moreover, clinical guideline of treatments for pancreatic cancer by Japanese Society of Pancreas has been published, and being established the concept of borderline resectable pancreatic cancer. The different points from NCCN guideline, we have deleted the portal vein invasion from the concept of borderline resectable pancreatic cancer. Therefore, our definition of borderline resectable pancreatic cancer is: (1) Tumor abutment of the SMA not to exceed greater than 180 degrees of the circumference of the vessel wall, (2) Gastroduodenal artery encasement up to the hepatic artery with either short segment encasement or direct abutment of the hepatic artery, without extension to the celiac axis, (3) Nerve plexus invasion around the celiac axis. Usually, borderline resectable pancreatic body cancer should be applied by modified Appleby's operation, known as distal pancreatectomy with en-bloc celiac axis resection (DP-CAR), and the clinical questions are; who should and should not have this aggressive operation, because we experienced high incidence of microscopic residual tumor by DP-CAR, probably due to the patient's condition with far advanced tumor stage. The overall survival of patients with DP-CAR without any neoadjuvant chemoradiotherapy is acceptable if the patients have R0 operation, but the patients with R1 had a poorer survival, compared to the survival of R0 patients. The problem of our experiences was that the rate of R0 was only 31%, even if we tried a DP-CAR. Thus, one should consider developing a potent treatment before surgery for patients with borderline resectable pancreatic cancer, because R0 surgery is essential for long survival. We are now proceeding a combination chemoradiotherapy using S-1 and radiation. In recent 13 months, 26 patients with borderline resectable pancreatic cancer were enrolled to this protocol, and of 26 patients, 21 patients were operated and resectability was 81%. In this series, 1 patient had total pancreatectomy, and 10 patients had DP-CAR, then patients with pancreatic body cancer were 11 patients. Simultaneous portal vein resection was done in 67%. The pathological effects of this protocol of NACRT were; grade 2b was obtained in 3 patients and grade 3 was 1 patient. Moreover, the rate of no residual tumor R0 was 81%, and this rate was obviously higher than R0 rate of patients without NACRT. According to these data, we concluded this preoperative treatment schedule was safe and feasible, and also might have a clinical benefit of long survival, because we had a high incidence of R0.

Thus, indications of arterial resection including DP-CAR, it's indication has been still controversial, and it is currently unknown who should be done DP-CAR and who should not be done. Herein, Wakayama experiences are presented, and clarify the problems, and finally make the future proposal.