

Does Endoscopic Sphincterotomy Have An Adverse Oncologic Effect In Patients Undergoing Curative Surgery For Ampulla Of Vater Cancer?

Yoo Jin CHOI¹, Joo-Hyun LEE¹, Hye-Sung JO¹, Sae Byeol CHOI¹, Wan-Bae KIM¹, Hyung-joon HAN¹, Tae Jin SONG¹, Dong-Sik KIM¹, Young-Dong YU*¹

¹Division Of HBP Surgery, Korea University Medical Center, REPUBLIC OF KOREA

Background : Ampulla of Vater (AoV) cancer often presented with obstruction of bile flow, which required bile drainage. There are abundant lymphatic channels and microvascular structures around the ampulla of Vater, which spread out from the mucosal layer to the extramucosal layer, extended to the common channel, common bile duct and the main pancreatic duct. The aim of this study was to evaluate the association between endoscopic sphincterotomy (EST) and risk of lymph node metastasis or blood stream metastasis in patients with AoV cancer.

Methods : We reviewed the medical records of 136 patients with AoV cancer who underwent pancreaticoduodenectomy from 2011 to 2020. We compared the perioperative outcomes of patients and lymph node metastasis, disease free survival and overall survival.

Results : 66 patients had endoscopic sphincterotomy for biliary drainage before surgery and the other 70 patients had percutaneous transhepatic biliary drainage. The lymphovascular (EST 34% vs. no EST 40.9%, $p=0.425$) and perineural (20.0% vs. 18.2%, $p=0.788$) invasions and cancer positive LN (30.0% vs. 34.8%, $p=0.546$) showed no significant differences in both groups. There were no significant differences in the 5-year overall survival rate (EST 68.1% vs. no EST 76%, $p=0.909$) and 2-year disease free survival rate (EST 69.7% vs. no EST 72.3%, $p=0.833$). In the per-protocol analysis of early (T1,2) and late (T3,4) stages of T-stage, there were also no significant differences in the OS, DSF, and recur rate.

Conclusions : The preoperative endoscopic intervention of the AoV cancer did not affect difference in oncologic outcome. The interval between the endoscopic sphincterotomy and the surgical resection might be too short to invade the surrounding tissue. Further evaluation on the interval affecting the oncologic outcome is needed in the future.

Corresponding Author : Young-Dong YU (hust1351@naver.com)