Is Prophylactic Pancreatic Stent Placement for Endoscopic Duodenal Ampullectomy Necessary?

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Background/Aim: Since only one prospective randomized controlled trial which showed that prophylactic pancreatic stent after endoscopic duodenal ampullectomy reduced post ERCP pancreatitis (PEP), almost physicians performed prophylactic pancreatic stent insertion after endoscopic ampullectomy. In this study, we evaluated the effectiveness of the prophylactic pancreatic stent for the patients who received endoscopic duodenal ampullectomy.

Patients/Methods: We retrospectively reviewed the medical records of consecutive patients received endoscopic duodenal ampullectomy in Samsung Medical Center from 2002 to 2011. They were classified into two groups according to insertion of pancreatic duct stent: stent group and no stent group. PEP risk factors, the development of PEP, and pancreatic duct stricture were compared.

Results: Eighty five patients received endoscopic duodenal ampullectomy for ampullar neoplasm. Fifty seven patients were in Stent group and 28 in no stent group. No stent was inserted because of cannulation failure in 21 patients, patent pancreatic duct opening in 3, and no trial in 4 patients. There was no difference in PEP risk factors including age, sex, and total bilirubin level between Stent group and No stent group. The PEP developed 6.89% (4/57) in stent group, 7.14% (2/28) in no stent group (p=0.983). All 6 patients with PEP had mild pancreatitis and fully recovered with conservative treatment. No patient developed pancreatic duct stricture.

Conclusion: There was no difference in the development of PEP between patients with and without prophylactic pancreatic duct after endoscopic duodenal ampullectomy. Therefore, it seems to need more study about the effectiveness of prophylactic pancreatic stent insertion to prevent PEP in endoscopic duodenal ampullectomy.

Key Words: Duodenal ampullectomy; Pancreatitis; Prophylactic stent