

**BP OP 3-2****A comparative study of laparoscopic versus open pancreaticoduodenectomy for ampulla of Vater cancer: a propensity score matched analysis**

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**Introduction** : There has been several comparative studies between laparoscopic pancreaticoduodenectomy (LPD) and open pancreaticoduodenectomy (OPD) in patients with periampullary carcinoma, but there are few studies about ampulla of Vater cancer (AVC) as a unique entity. The objective of this study was to evaluate the difference between LPD and OPD in patients with AVC using propensity score matched analysis.

**Methods** : Data from patients who underwent PD due to AVC between August 2011 and December 2017 at the Asan Medical Center, Seoul, Korea, were retrospectively reviewed. Demographics, surgical variables, and postoperative outcomes were compared in LPD and OPD groups.

**Results** : A total of 359 patients underwent PD due to AVC. Among these patients, 76 were treated by LPD and 283 were treated by OPD. After matching, operation time was significantly longer in LPD group ( $P = 0.003$ ), but postoperative hospital stays and Clavien-Dindo classification of postoperative complication was significantly better in LPD group ( $P = 0.002$  and  $0.017$ , respectively). There was no significant difference in recurrence free survival and overall survival between the 2 groups ( $P = 0.754$  and  $0.768$ , respectively).

**Conclusions** : This study is the first study that evaluated the difference of LPD and OPD in patients with AVC using propensity score matched analysis. LPD for AVC is feasible, safe, and has equivalent oncologic outcomes with shorter hospital stays, and lower incidence of postoperative complication in comparison with OPD.

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