

Prognostic factors of distal bile duct adenocarcinoma

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Introduction: Distal bile duct cancer is rare but fatal disease. Numerous prognostic factors have been suggested, however, they are still controversial. Diagnostic tools and surgical standardization have been developed, but survival is not elucidated clearly. This study was designed for analyzing prognostic factors of distal bile duct cancer to find correctable causes and enhance survival.

Methods: Two hundred and forty-four patients, proved as distal bile duct adenocarcinoma by pathology, who performed pylorus-preserving pancreaticoduodenectomy (PPPD) or Whipple's procedure(WHP) were enrolled from Samsung Medical Center from February 1995 to June 2011. We investigated their clinical features, postoperative complications, survival, and prognostic factors retrospectively.

Results: One hundred and sixty-seven (68.4%) and seventy-seven (31.6%) patients were male and female respectively and their mean age was 62.3 (31-88, ± 9.0) years. Among them, one hundred and seventy-four patients (71.3%) underwent pylorus-preserving pancreaticoduodenectomy and seventy patients (28.7%) underwent Whipple's procedure. Mean follow-up duration was 26.6 (0-175) months. The postoperative morbidity and mortality were 45.1% and 4.1%, respectively. Five-year survival rate was 47.0% and mean survival duration was 60.9 (17.3-104.7) months. Preoperative CA 19-9 level (more than 35), resection margin (positive), T stage (T2, T3, T4), and lymph node status (positive) were significant indicators for death in multivariate analysis of resectable distal bile duct adenocarcinoma.

Conclusions: As most previous reports suggested, surgical resection margin, tumor invasion status and lymph node invasion status were revealed to be indicators of poor prognosis of distal bile duct cancer. Notably, preoperative CA 19-9 level, regarded as a controversial risk factor in many previous researches, proved to be one of them in this study. More thorough study about preoperative CA 19-9 as a prognostic factor of distal bile duct cancer is needed.