

Clinicopathological Features And Long-term Outcomes Of Intraductal Papillary Neoplasms Of The Bile Duct Of The Liver: Single-institution Experience With 146 Patients

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Background : Intraductal papillary neoplasm of the bile duct (IPNB) has wide range of histopathology and intra- and extrahepatic tumor locations.

Methods : This retrospective single-center study evaluated the clinicopathological features and long-term outcomes of 146 patients with IPNB of the liver (IPNB-L) who underwent hepatic resection between January 2002 and June 2019.

Results : The 146 patients included 97 (66.4%) men and 49 (33.6%) women, of mean age 64.3 ± 8.0 years. Seventy-two (49.3%) patients were incidentally diagnosed, with no specific symptoms, and 18 (12.3%) were found to have hepatolithiasis. Sixty-one (41.8%) and two (1.4%) patients underwent concurrent bile duct resection and pancreaticoduodenectomy, respectively, and 130 (89.0%) underwent R0 resection. Low-grade and high-grade intraepithelial neoplasia, and invasive carcinoma were identified in 26 (17.8%), 50 (34.2%), and 70 (47.9%) patients, respectively. Five-year tumor recurrence and patient survival rates were 8.4% and 93.9%, respectively, in patients with high-grade neoplasia, and 41.5% and 72.3%, respectively, in patients with invasive carcinoma. CA19-9 >37 U/mL and R1 resection were independent risk factors for tumor recurrence and reduced survival in patients with carcinoma. The combination of hypermetabolic fluorodeoxy-glucose-positron emission tomography (FDG-PET) or elevated CA19-9 showed a sensitivity of 91.8% and a specificity of 61.9% for prediction of IPNB-L with high-grade neoplasia and carcinoma.

Conclusions : IPNB-L is a rare type of intrahepatic biliary neoplasm can range histologically from benign disease to invasive carcinoma. Surgical curability is the most important prognostic factor, with aggressive resection highly recommended to achieve R0 resection. FDG-PET and CA19-9 expression may help in preoperatively diagnosing malignant IPNB-L.

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