

Pancreatic Adenocarcinoma Associated to Intraductal Papillary Mucinous Neoplasia: Histopathological Particularities and Clinical Implications

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Abstract

Background: Pancreatic ductal adenocarcinoma (PDAC) is the most common pancreatic tumor, known for an aggressive evolution. Intraductal papillary mucinous neoplasm (IPMN) is a rare pancreatic tumor, considered a premalignant lesion with the possibility of carcinogenesis towards PDAC. The clinical, surgical and histopathological particularities of the association between PDAC and IPMN are yet unknown, further research being needed.

Methods: We have conducted a retrospective descriptive study, on a nine-year period (2012-2020), with the aim of comparing the characteristics of patients that underwent curative surgical interventions for solitary PDAC and PDAC associated to IPMN.

Results: Fifteen patients with PDAC associated with IPMN (Group 1) and 386 patients with solitary PDAC (Group 2) were included in our study. Group 1 had a younger average age (61.8 years) compared to Group 2 (63.89 years). Total pancreatectomy was more frequently performed for Group 1 than Group 2 (33.33% vs 12.43%). Group 1 had a higher percentage of cases with positive perineural, perilymphatic and perivascular invasion. Group 1 registered a worse overall survival, as well as a worse short-time survival compared to Group 2.

Conclusions: PDAC associated to IPMN registers distinct epidemiological, clinical and histopathological characteristics compared to solitary PDAC.

Key words: pancreatic cancer, pancreatic surgery, pancreatic adenocarcinoma, intraductal papillary mucinous neoplasm