

IPMN of the pancreas - Evaluation of pathohistological subtypes and clinical outcome

Marius Distler

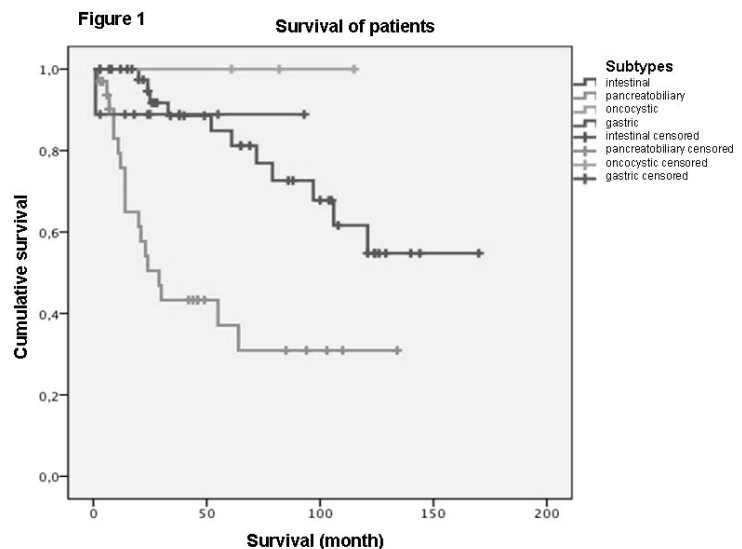
Department of General-, Thoracic- and Vascular Surgery, University hospital Carl Gustav Carus, Germany

In recent years papillary mucinous neoplasms of the pancreas (IPMN) have been increasingly recognized in clinical practice. IPMNs are estimated to have a better prognosis than pancreatic ductal adenocarcinomas. In addition to the different growth types (main duct vs. branch duct), the histological subtypes of IPMN (intestinal, pancreatobiliary, gastric and oncocystic type) became prognostically relevant. These subtypes can be characterized by different expression patterns of MUC using immunohistochemistry. In this study we analyzed the IPMNs of two pancreatic centers regarding to MUC expression and subtypes as well as the clinical outcome.

Over a period of 10 years we reevaluated all pancreatic resections due to a cystic tumor in two German university hospitals. Cases with IPMN were screened and subtypes were defined by histopathological analysis including immunohistochemical analysis of MUC (MUC1⁺, MUC1⁻, MUC2⁻, MUC5AC⁺) expression. Furthermore we determined clinical and follow up data as well as patients outcome.

A total of 128 IPMN were detected. In 98 cases histopathological subtype classification was possible: intestinal type n=45 (46%), pancreatobiliary type n=38 (39%), gastric type n=11 (11%) and oncocystic type n=4 (4%). We performed the following types of resections: pancreatic head resections in 76.4%, left resections in 14.2%, total pancreatectomies in 5.5% and pancreatic segment resections in 4% of the cases. Median survival of intestinal IPMN is significantly better than pancreatobiliary IPMN (60 vs. 21 month) (Figure 1). Clinical data of the IPMN subtypes showed no differences. Common preoperative clinical symptoms were dorsalgia, abdominal pain and obstructive jaundice.

Evaluation of IPMN subtypes supports the postoperative prediction of the patient's prognosis. Therefore, it could lead to improvement in clinical management. Potentially identification of subgroups with the need for adjuvant therapy is possible.



Biography

M. Distler started to study medicine at LMU Munich, Germany and earned his medical degree in 2004 at TU-Dresden, Germany. Till 2004 he works as a general surgeon at the department of general-, thoracic- and vascular surgery at the university hospital of Dresden, Germany. His research activity is focused on carcinogenesis and treatment of pancreatic cancer. He presented and published research results on several national and international meetings or journals.