Frequency and Characterization of Benign Lesions in Pancreatic Specimens of Patients Operated for the Suspicion of Pancreatic Cancer

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Context A final diagnosis of benign lesions is reported in up to 21% of patients who underwent duodenoccephalopancreatectomy for neoplasia, whereas no data have yet been published for resection of the body-tail. Objective To investigate the frequency and to characterize the benign lesions mimicking a neoplasia in the head and in the body-tail of the pancreas. Methods We retrospectively reviewed all the pancreatic specimens collected from 2005 to 2011 in the database of the Institute of Pathology of Mainz. Patients with a final diagnosis excluding malignancy were analyzed by histological, clinical and imaging findings. Results Three-hundreds and 73 patients were identified. A final diagnosis of benign disease was observed in 33 patients (8.8%), in 25 out of 298 (8.4%) in the resections of the pancreatic head and in 8 out of 75 (10.7%) of the body-tail. Among them we found paraduodenal pancreatitis (PP) in 13 cases (39.4%), autoimmune pancreatitis (AIP) in 11 (33.3%), chronic pancreatitis (CP) in 6 (18.2%) and accessory spleen in 3 (9.1%). In the head of the pancreas the most frequent diagnosis is PP and AIP, whereas in the body-tail accessory spleen and CP. Patients with benign lesions were more likely to be males, younger, smokers and drinkers, with longer lasting pain. Lower serum levels of CA 19-9 and lower frequency of jaundice were more frequently observed in this group. Pancreatic calcifications were more frequently associated with benign lesions whereas a larger dilation of common bile duct in the malignant lesions. AIP and PP have different clinical and radiological profiles. Conclusion Benign lesions are observed with the same frequency in specimens of the head or body-tail of the pancreas, while the type of final diagnosis is different.