Cystic lesions of the pancreas are detected more frequently due to the improvement of imaging technologies. Their prevalence increases with age. In 95 % of cases, the spectrum of cystic neoplasia includes intraductal papillary mucinous neoplasia (IPMN), mucinous cystic neoplasia (MCN), serous cystic neoplasia, and solid pseudopapillary neoplasia (SPN). Diagnostic procedures aim to distinguish between neoplastic cystic and non-neoplastic cystic lesions as well as serous and mucinous lesions because of their different malignant potential. In most cases, cystic lesions are detected incidentally by computed tomography and magnetic resonance imaging (MRI) performed for other reasons. In our opinion, MRI/magnetic resonance cholangiopancreatography (MRCP) and endoscopic ultrasound (EUS) are complementary diagnostic procedures. In doubtful cases, cyst fluid analysis might be performed. The most frequent lesions are IPMNs. MRI/MRCP allows the detection of the number of cystic lesions, the relation to the main pancreatic duct, and the size of the lesion. EUS is superior to evaluate mural nodules. The relation to the main pancreatic duct can more easily appreciated with secretin MRI, MCN, SPN as well as main-duct type IPMN and BD-IPMN with "high-risk stigmata" for malignancy should be resected. Asymptomatic BD-IPMN without mural nodules, no main duct involvement, and a size less than 30 mm can be followed with a watchful waiting strategy.