

Risk-stratifying IPMN & Management of Pancreatic Cystic Neoplasms

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In the international consensus Fukuoka guidelines, the definition of main duct IPMN (MD-IPMN) was changed by lowering the threshold of the MD caliber from 10 mm to 5 mm to increase the sensitivity of the diagnosis of MD-IPMN. This change seems accepted well in general.

To predict malignancy, high-risk stigmata are defined to include jaundice, contrast enhanced solid component or mural nodule, and the size of MD > 10 mm, of which the presence of solid component is most reliable. The size of BD-IPMN > 30 mm was moved down from the high-risk stigmata to the lower category named “worrisome features”. The other worrisome features include thickened and enhanced cyst wall, MD size 5-9 mm, mural nodules without enhancement, MD stricture with upstream dilation, lymphadenopathy and present and/or recent acute pancreatitis. All BD-IPMNs with these worrisome features should be further evaluated by endoscopic ultrasonography (EUS). If no “worrisome features” are present, no further initial work-up is recommended, although surveillance is still needed. The two categories to stratify the risk of malignancy are also accepted well, although the size of an enhancing mural nodule should be further taken into account.

Some cystic neoplasms such as lymphoepithelial cyst, completely unilocular mucinous cystic neoplasm, neuroendocrine neoplasm with cystic changes, macrocystic or oligocystic serous cystic neoplasm (SCN) are often quite difficult to distinguish from BD-IPMN. Resection may not be avoidable in these entities, although the surgical indication for BD-IPMN has become more conservative. BD-IPMN larger than 3cm without “high-risk stigmata” can be observed without immediate resection, but these different kinds of tumors frequently look like BD-IPMN with solid component or wall thickening. Most cases of these non-IPMN cystic tumors need to be resected for the definitive diagnosis. EUS-guided fine needle aspiration (FNA) may be helpful to distinguish macro-/oligocystic SCN from BD-IPMN when the aspirate from completely “flat” cyst without wall thickening shows a very low CEA level.