

The resectable pancreatic ductal adenocarcinoma: To FNA or not to FNA? A diagnostic dilemma, introduction

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In most patients (up to 95%), pancreatic ductal adenocarcinoma (PDAC) is diagnosed late with locally advanced or metastatic disease^[1,2] with a low overall 5-year survival rate <5%.^[3,4] In addition and due to the fact, that the prevalence of differential diagnosis (e.g., pancreatic neuroendocrine neoplasia and metastases) is reported to be low (<5%). Current guidelines^[5-7] and international consensus guidelines^[8] recommend radical surgery for all small solid pancreatic lesions (SPL) unless contraindications are present or a strong suspicion of a specific diagnosis other than PDAC is raised due to patients history or ambiguous imaging results. In principle, all small SPL are presumed to be PDAC if not otherwise proven; and therefore, radical surgery is recommended without prior histological or cytological verification.^[8,9]

The role of conventional imaging methods, for example, ultrasound, computed tomography (CT), and magnetic resonance imaging in the differential diagnosis of pancreatic masses was reported to be disappointing.^[4,8,10] Today, improved imaging techniques allow detection of smaller SPL other than PDAC, and this might change management.^[9,11-22] Therefore, in patients with small SPL the differential diagnosis could be evaluated to determine the indication for radical surgery.^[23] This has been strengthened by the

inclusion of endoscopic ultrasound (EUS) in the National Comprehensive Cancer Network guidelines.^[24] Preoperative diagnosis of T1 carcinoma (<20 mm) is rare (<5%). In an analysis of 13.131 PDAC cases, only 3.11% were staged as stage T1a.^[2] In large retrospective cohort studies of patients with small SPL (≤10 mm or ≤15 mm) diagnosed using EUS-guided fine-needle aspiration (FNA), only 4.3%–22.5% were finally diagnosed as PDAC.^[9,25]

EUS-FNA is currently considered the method of choice to diagnose small SPL, also providing tissue sampling. EUS-FNA is 80%–90% sensitive and nearly 100% specific for the diagnosis of pancreatic malignancy.^[26-29] EUS and EUS-FNA accurately diagnosed pancreatic cancer in 23 of 25 patients (92%) in whom the mass was undetected by CT^[22] and in 92% of patients without a definite mass on CT.^[25] The risk of adverse events caused by EUS-FNA of SPL is very low and inversely related to tumor size.^[30] EUS-FNA is an invasive procedure with a small, but not negligible risk profile in regard to bleeding, perforation, and tumor cell seeding.^[31-34] EUS-FNA currently may be regarded the “gold-standard” of the final diagnosis in small SPL and in SPL with inconclusive CT findings.

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In the two following papers, the pros and cons of FNA before surgery in resectable PDAC are discussed.

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