Use of Endoscopic Ultrasound in Diagnosing Plasmacytoma of the Pancreas

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ABSTRACT

Introduction An extramedullary plasmacytoma is a discrete collection of monoclonal plasmocytes arising in tissues other than the bone. Gastrointestinal involvement has been reported in approximately 10% of cases and usually involves the liver; however, there have been a number of cases involving the pancreas. Discussion Although helical CT can be used to diagnose pancreatic plasmacytomas based on a typical radiological appearance, there are a number of pitfalls with CT including similar radiologic appearances of other pancreatic tumors, malignant seeding, and creation of multiple secondary extramedullary plasmacytomas. Tissue diagnosis is critical to management in pancreatic lesions as the decision to pursue surgery (pancreatic adenocarcinoma) versus chemotherapy (lymphoma) or radiation (extramedullary plasmacytoma) is dependent on a correct tissue diagnosis. Tissue diagnosis can change morbidity and mortality with respect to specific treatment of pancreatic lesions in the milieu of pancreatic tumor variance. In confirmed tissue diagnosis of pancreatic plasmacytoma, radiation and chemotherapy can be preferentially chosen over high risk surgery. EUS-FNA has a lower risk of malignant seeding, complications, and a high sensitivity in the diagnosis of pancreatic plasmacytomas, especially with increased number of passes and bedside cytopathologists. Conclusion It is important for physicians to have a high index of suspicion for diagnosing pancreatic plasmacytoma in the appropriate clinical setting (i.e., a previously diagnosed multiple myeloma, extramedullary plasmacytoma or any other plasma cell neoplasm). EUS-FNA is now an indispensable imaging modality to achieve the diagnosis of pancreatic extramedullary plasmacytoma with an apparently low rate of complications, and should be the first choice for tissue evaluation.