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# VALUE OF ENDOSCOPIC ULTRASONOGRAPHIC FEATURES IN PREDICTING THE MALIGNANCY OF PANCREATIC MUCINOUS CYSTIC NEOPLASMS AND INTRADUCTAL PAPILLARY MUCINOUS NEOPLASMS

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**Introduction** Pancreatic mucinous neoplasms, which mainly include mucinous cystic neoplasms (MCNs) and intraductal papillary mucinous neoplasms (IPMNs), possess a potentially malignant tendency. It remains difficult to adopt reliable methods in predicting the malignancy progression of the conditions.<sup>1</sup> Endoscopic ultrasonography (EUS) can present relatively high diagnostic value in respect of sensitivity and specificity.<sup>2</sup> However, its value in predicting their malignancy is unclear yet.

**Methods** The data of EUS features of 21 patients with pancreatic mucinous neoplasms (18 males and 3 females) were reviewed. All the patients were admitted in Changhai hospital between January 1998 and December 2007. Surgical resection were completed and confirmed by subsequent surgical pathology in all the patients. Of them, 11 were IPMNs (5 benign, 2 borderline, 4 malignant) and 10 were MCNs (2 benign, 8 malignant).

With the SPSS10.0 statistical software, independent sampler t test was performed on the norm variables in mean±SD form, while enumeration data in fourfold table was verified by  $\chi^2$  test with Fisher exact probabilistic method. Area under the receiver operating characteristic curve (ROC) for all data was calculated and the optimal cut-off values were determined by Youden Index. A p value of less than 0.05 was considered to be statistically significant.

**Results** It was found that the main pancreatic duct with a diameter of  $\geq 11.0$  mm can predict the malignancy of IPMNs with a sensitivity of 75% and specificity of 100%, and the mural nodule with a height of  $\geq 4.3$  mm can predict the malignancy of IPMNs with a sensitivity of 100% and specificity of 100%. Cystic wall with a thickness of  $\geq 2.4$  mm can predict the malignancy of MCNs with a sensitivity of 100% and specificity of 100%, and mural nodule with a height of  $\geq 8.9$  mm can predict the malignancy of MCNs with a sensitivity of 87.5% and specificity of 100%.

**Conclusion** EUS features are of high value in predicting the malignancy of MCNs and IPMNs.

**Competing interests** None.

**Keywords** endoscopic ultrasonography, intraductal papillary mucinous neoplasm, mucinous cystic neoplasm, pancreatic cystic neoplasm.

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