PTU-036

REPRODUCIBILITY OF BIOCHEMICAL MARKERS OBTAINED DURING ENDOSCOPIC ULTRASOUND GUIDED ASPIRATION OF PANCREATIC CYSTIC LESIONS

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Introduction Imaging morphology alone does not currently have high enough accuracy to determine the nature of pancreatic cystic lesions and therefore sampling of cyst fluid for biochemical markers via endoscopic ultrasound (EUS) has value. There is little data showing whether these markers are stable over time in an individual cyst. The aim of this study was to determine the variability of these markers.

Methods Patients are prospectively added to the EUS FNA database when attending for EUS and the period April 2003–April 2010 was examined with reference to patients undergoing repeat EUS and aspiration of cystic lesions. These individuals had either declined surgery or there was clinical doubt concerning the neoplastic potential of the cyst.

Results During the study period 267 EUS and cyst aspiration were performed. 28 individuals had 61 repeat procedures (24 had 2 procedures, 3 had 3 procedures and 1 had 4 procedures). Complete data was available on 13 individuals. Mean CEA at first aspiration was 74.8 compared to 121.0 at second aspiration ($p=0.32$) with a mean difference of -46.2 . Mean amylase at first aspiration was 7142.4 compared to 7344.1 at second aspiration ($p=0.98$) with a mean difference of -186.2 . There were no changes in CEA from normal to abnormal between aspirations. In two individuals there was a significant change in amylase level from normal to abnormal, both of whom were subsequently found to have undergone malignant change at surgery.

Conclusion In this small study, biochemical markers appear relatively constant. Major changes in amylase may be associated with malignant change. Further study on a larger cohort is required.

Competing interests None.

Keywords endoscopic ultrasound, markers, pancreatic cystic neoplasm.