AB070. P042. Serum protein profile in IPMN

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Background: The incidence of intraductal papillary mucinous neoplasm (IPMN) is increasing and thereby the number of patients under surveillance. There is a need for easily available serum biomarkers to distinguish patients with low or moderate grade dysplasia from those with high grade dysplasia or IPMN-associated cancer needing surgery.
Methods: In 45 patients operated for IPMN 2000–2015 had preoperative serum samples available. There were 13 patients with mild, 10 with severe dysplasia and 22 with IPMN associated cancer. The preoperative serum samples of the IPMN patients and of 11 healthy individuals were analyzed with mass spectrometry (Synapt-G2S, Waters Ltd). Two or more unique peptides were used to identify 436 proteins that were quantified. Statistical analysis was performed with principal component analysis, orthogonal partial least square discriminant analysis and receiver operating curve analysis.
Results: The proteomic signature separated IPMN patients and controls by C-reactive protein (CRP) (UniProt accession P02741), kininogen-1 (P0042), lipoprotein lipase (P06858), SPINK2 [kazal-2 type serine-protease-inhibitor (P20155)] and SPARCL1 (secreted protein acidic rich in cysteine like protein, Q14515). The proteomic signature between dysplastic IPMN and cancer differed less. Mild and severe dysplasia did not differ significantly.
Conclusions: The protein profile differed between IPMN-patients and healthy controls but not within IPMN groups.

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