(highest vs. lowest category HR=1.98, 95% CI: 0.94–4.16, p = 0.07, trend HR=1.23, 95% CI: 0.96–1.57, p = 0.10) and when BMI was included (trend HR=1.21, 95% CI: 0.94–1.55, p = 0.13).

Conclusion The association between PA and cancer risk is dependent on the age at which PA is measured. This possibly reflects occupational activity and differences in general medical health with age or residual confounding. The associations were similar when adjusted for BMI, suggesting an independent mechanism of PA. If the inverse association of increased PA in younger participants is causal, one in six cases of pancreatic cancer might be prevented by encouraging more PA. Aetiological studies should measure PA at different ages when investigating pancreatic cancer.

Disclosure of Interest None Declared.

PTH-093 CHROMOGRANIN-A : CAN IT PREDICT RADIOLOGICAL PROGRESSION IN NEUROENDOCRINE TUMOURS?

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Introduction Chromogranin A (CgA) is considered as the best general marker for the diagnosis and follow-up of neuroendocrine tumours (NETs) and is also of prognostic value. In literature, there are no available studies which analysed the role of CgA as a predictor of radiological disease progression in all NETs. Present study investigates the prognostic value of CgA as a predictor of radiological disease progression in NET patients.

Methods Patients with metastatic NETs and evidence of Radiological Progression (RP) according to RECIST 1.1 were identified from a NET database. Plasma CgA were measured 6 and 12 months before RP and at the event of RP. CgA was measured with the Supra-regional-Assay-Service radioimmunoassay (Hammersmith Hospital), normal value <60 pmol/L. The tumours were graded according to the 2010 WHO classification, as G1 (Ki67 <2%), G2 (Ki67: 2–20%), G3 (Ki67 >20%).

Results 152 patients were evaluable including 91 midgut NET and 61 pancreatic NETs (PNETs). Of these, 56 were G1 NETs, 65 G2, 10 G3, 21 of unknown histology. 95.4% of the patients had liver metastases, whereas bone and lung metastases were present in a smaller proportion of patients (27.6 and 9.9%, respectively). Median CgA for all NETs 6 months before RP was 213 pmol/L [Interquartile 1 (Q1)=67 and 3 (Q3)=664.5 pmol/L] compared to 166 pmol/L (Q1 52, Q3 535 pmol/L) one year before RP, T = 598.5, p = 0.07. Significant results were found for PNETs [median CgA 6 months before RP: 100 pmol/L (Q1 53, Q3 286.25 pmol/L) and at 12 months: 52 pmol/L (Q1 36.25, Q3 128 pmol/L), T=52, p = 0.048], but not for midgut NETs [median CgA 6 months before RP: 389.5 pmol/L (Q1 131.5, Q3 791.5 pmol/L) and at 12 months: 319 pmol/L (Q1 158, Q3 753 pmol/L), T=191, p = .39]. Both midgut and PNETs CgA values were significantly higher at RP than 12 months before [267 pmol/L (Q1=66, Q3=777) vs. 166 pmol/L (Q1=52, Q3=535), T= 394.5, p = 0.03]. Overall, G1 tumours had median CgA value at 6 months significantly higher than at 12 months [181(Q1=56.25, Q3=624) vs. 149.5 pmol/L (Q1=44, Q3=247.25), T=70, p = 0.048].

Conclusion CgA seems to have predictive value 6 months prior to RP for PNETs and G1 tumours, which may be of value to identify specific subgroups of patients who may benefit from a more aggressive follow-up with possible early intervention in case of increased CgA levels. Further prospective studies are needed to enable more definitive conclusions.

REFERENCES

1 Oberg K *et al*. *Pancreas* 2011
2 Ter-Minassian M *et al*. *Endocr Relat Cancer* 2013
3 Welin S *et al*. *Neuroendocrinology* 2009
4 Jensen KH *et al*. *Scand J Gastroenterol* 2013

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PTH-094 BENEFIT OF REAL TIME CYTOLOGICAL EXAMINATION IN EUS GUIDED BIOPSY OF SUSPECTED PANCREATIC MALIGNANCY

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Introduction Endoscopic ultrasound (EUS) guided sampling of advanced malignant pancreatic lesions is increasingly being performed in order to confirm malignancy prior to chemotherapy and/or radiotherapy. The Royal Hampshire County Hospital provides EUS services for central and north Hampshire. Prior to mid-2013 there was no facility for examination of cytological specimens during EUS procedures. In line with national commissioning guidelines, a real time pathology service allowing cytological examination during the EUS procedure was instigated from 1st July 2013. The aim of this study was to assess the impact of real time cytological examination on the yield of EUS guided sampling of suspected malignant pancreatic mass lesions.

Methods All patients with suspected pancreatic malignancy undergoing EUS guided tissue sampling over a 1 year period from 1st January 2013 to 31st December 2013 were prospectively audited. Note was made of whether real time cytological examination was perfomed by a technician ± histopathologist. Other data collected included type of needle used, number of passes made with the biopsy needle and total duration of procedure. The diagnostic yield of EUS guided pancreatic sampling was compared with and without real time cytological examination.

Results Twenty-seven procedures were performed over the 12 month period. The majority (25 procedures) were performed using Procore™ fine needle biopsy (FNB) needles. Seventeen procedures were performed without real time cytological examination. Of these, 14 (82%) yielded positive cytology, 1 yielded negative cytology (6%) and there was insufficient tissue in 2 (12%) cases. Ten procedures were performed with real time cytological examination and of these all yielded positive cytology. Median number of passes made with the biopsy needle was 2 (range 2–3) without real time cytological examination versus 2 (range 1–4) with real time cytological examination. Mean procedure duration was 30 (±12) min without real time cytological examination versus 36 (±15) min with real time cytological examination.

Conclusion In our centre, the diagnostic yield of EUS guided sampling of suspected malignant pancreatic mass lesions without real time cytological examination was 82% which is in line with published data [1] However, the addition of real time cytological