FREQUENCY AND CHARACTERISTICS OF HIGH-RISK NOVEL URINARY AND BLOOD PEPTIDE MARKERS FOR A200 GUT AND CANCER RISK FACTORS. Tertiary centres. Our endoscopy screening centre is a district general hospital (DGH) providing EMR service for a population of around 550,000. We aimed to evaluate the frequency of large colorectal polyps with an increased risk of malignancy to plan further service provision for these lesions in the DGH setting.

Methods The hospital endoscopy database was interrogated to identify all colorectal EMRs for large polyps (>20 mm) performed from Jan 2014–Sept 2017. The data was retrospectively appraised for polyp size, site, Paris classification, histology and cancer risk factors.

Introduction Recent guidelines and published data of large colorectal polyps suggest polyph characteristics associated with an increased risk of submucosal invasive cancer (SMIC) which might be best managed with en bloc resection. Data regarding the frequency and characteristics of such lesions are limited outside of tertiary centres. Our endoscopy screening centre is a district general hospital (DGH) providing EMR service for a population of around 550,000. We aimed to evaluate the frequency of large colorectal polyps with an increased risk of malignancy to plan further service provision for these lesions in the DGH setting.

Results A total of 239 lesions were identified over a 45 month period. 35 (15%) lesions were excluded from further analysis owing to lack of data on either size, Paris classification or histology. 204 lesions (183 patients) with complete data were further analysed. Of 183 patients, the mean age was 69 (M: F 105:99). The mean size of polyps was 32 mm. 144 (60%) were distal lesions. 17 (8%) lesions were found to have cancer in the resected histological specimen. Table 1 summarises the characteristics of the lesions analysed.

Conclusion High-risk lesions (HGD/cancer) comprised 30% of the total cohort and those potentially associated with covert SMIC (Iic and distal Is/Is+Iia lesions) formed 34% of the cohort. From our data, up to 32 lesions per year may necessitate en bloc resection. A nested audit has identified the need to plan for service provision in a DGH for large colorectal polyps including potential referral pathways to achieve en bloc resection of lesions with a higher potential for SMIC.

REFERENCE

PTU-059
NOVEL URINARY AND BLOOD PEPTIDE MARKERS FOR DETECTION OF COLORECTAL CANCER – EARLY RESULTS

Introduction The establishment of screening programmes and the two week wait pathway (2WW) to detect CRC is still largely dependent on invasive and expensive endoscopic/radiological methods. There remains a quest for early detection of colorectal cancer (CRC) using non-invasive methods which are well tolerated and patient acceptable. The aim is to identify putative peptide markers for CRC in urine and plasma.

Methods Urine samples from 12 CRC, 6 colorectal adenomas and 6 controls were evaluated in respect to their peptide profiles by capillary electrophoresis-mass spectrometry (CE-MS). The urinary peptide profiles were compared to those of plasma from another cohort of CRC patients and controls after total cross validation.

Results From the 392 plasma and 158 urinary CRC peptide marker candidates, ten were found identical and 16 showed sequence overlap demonstrating their origin from the same protein and protein region. Combining these 26 peptides to a support vector machine classifier resulted in the differentiation of the 12 CRC from the 6 colorectal adenomas and 6 controls with a sensitivity of 1.00 (CI:0.84–1.00) and a specificity of 0.92 (CI: 0.84–1.00) after total cross validation.

Conclusions Peptide identification in urine and plasma shows promise as non-invasive markers for CRC. Further work is underway to validate the specific proteases predicted to be responsible for peptide marker generation at tissue level.