

due to submucosal fibrosis as the lesion had previously been biopsied and tattooed under the lesion.

Conclusion Hybrid-biopsy EMR is a simple method, requiring a widely available and inexpensive device used in every-day practice. The procedure can be performed safely by endoscopists inexperienced in ESD. Using a rotatable biopsy forceps will make this even easier to perform.

P62

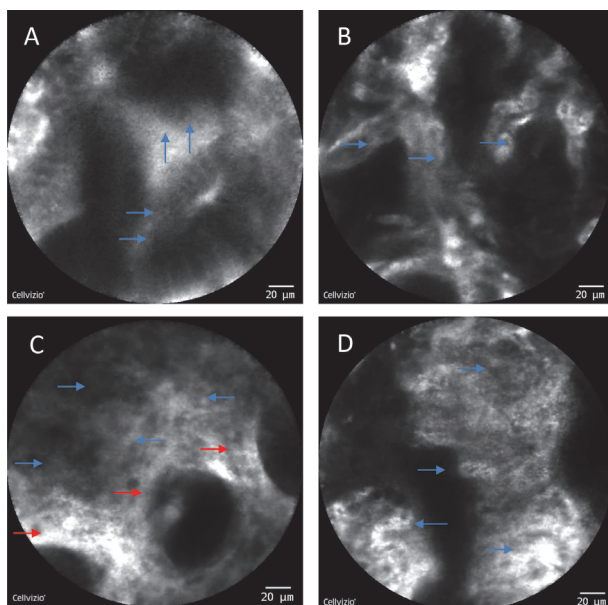
PROBE-BASED CONFOCAL LASER ENDOMICROSCOPY AS A NOVEL TECHNIQUE FOR DIAGNOSIS OF SIGNET RING CELL CARCINOMA

¹Nastazja Dagny Pilonis*, ²Maria O'Donovan, ¹Sue Richardson, ¹Rebecca Fitzgerald, ¹Massimiliano di Pietro. ¹Mrc Cancer Unit University of Cambridge, Cambridge, UK; ²Department of Histopathology Cambridge University Hospitals, Cambridge, UK

10.1136/gutjnl-2020-bsgcampus.137

Introduction Hereditary diffuse gastric cancer (HDGC) syndrome, which is related to germline CDH1 mutation, confers a 70% lifetime risk of gastric cancer. Endoscopic surveillance is an alternative to prophylactic gastrectomy in patients that want to delay surgery. Endoscopic diagnosis of early signet ring cell carcinoma (SRCC) is challenging on either standard or enhanced imaging, due to the inconspicuous nature of SRCC foci. Probe-based confocal laser endomicroscopy (pCLE) has not previously been evaluated for diagnosis of SRCC. In this study, we aimed to develop endomicroscopic diagnostic pCLE criteria for early SRCC in individuals with HDGC syndrome.

Methods This pilot prospective phase study was conducted in patients with HDGC undergoing endoscopic surveillance at a single tertiary referral centre. First, white light endoscopy and narrow band imaging (NBI) were used to inspect the gastric mucosa in order to pinpoint pale areas. After fluorescein



Abstract P62 Figure 1 pCLE features characteristic of SRCC: A - glands with attenuated margins (arrows); B - glands with irregular or spiculated shape (arrows); C - heterogeneous granular stroma with sparse glands (blue arrows show heterogeneous granular stroma and red arrows indicate sparse glands); D - enlarged vessels with tortuous shape and turbulent flow (arrows)

injection pale area lesions as well as negative control areas were assessed by pCLE, using coagulation marking to ensure correspondence between pCLE and biopsy location. Finally, pCLE videos were analysed off-line by an expert gastrointestinal pathologist and an endoscopist experienced in pCLE diagnosis, in an unblinded fashion in order to identify characteristic features of SRCC.

Results Overall, 16 patients received pCLE on a total of 50 endoscopic locations, of which 4 areas with confirmed SRCC on biopsies. A total of 113 video sequences were screened, of which 8 derived from areas with confirmed SRCC on biopsies. These were assessed together with 12 negative control areas, using histological slides as morphological reference. We identified 4 pCLE diagnostic criteria for SRCC. These were: glands with attenuated margins, glands with irregular or spiculated shape, heterogeneous granular stroma with sparse glands, enlarged vessels with tortuous shape and turbulent flow (figure 1).

Conclusions We have identified four pCLE features characteristic of SRCC. These novel diagnostic criteria are being validated prospectively in the ongoing second phase of the clinical study.

P63

UREA TREND IS SUPERIOR TO ABSOLUTE UREA CONCENTRATIONS AT PREDICTING ACUTE UPPER GASTROINTESTINAL BLEEDING

Stephanie Poo*, Rigers Cama, Rajan Patel, Kalpesh Besherdas. Royal Free London NHS Trust, London, UK

10.1136/gutjnl-2020-bsgcampus.138

Introduction Serum urea concentration is a well-established marker of acute upper gastrointestinal bleeding (AUGIB) and is used to risk-stratify patients requiring emergency endoscopy. However, the utility of absolute urea concentrations is limited due to its non-discriminative ability to differentiate AUGIB from acute and chronic kidney disease, which often co-exist. We aimed to evaluate the diagnostic value of the urea trends in the assessment of severe AUGIB compared to absolute urea concentrations.

Methods A retrospective analysis of patients who underwent emergency gastroscopies in theatres for suspected acute upper gastrointestinal bleeding from September 2018 and May 2019 was conducted at a district general hospital. Baseline demographics, clinical characteristics, blood test results and endoscopy reports were extracted from medical records. Baseline urea concentrations were obtained from historical records where available. Active bleeding was defined as the need for therapeutic endoscopic intervention. Statistical analyses were performed using SPSS software and were considered statistically significant if the p value was <0.05.

Results 158 consecutive cases of AUGIB were identified; the median age was 72 years and 102 (65%) were male. Melaena was the most common presentation (n=87, 55%), followed by coffee-ground emesis (n=37, 23%), frank haematemesis (n=22, 14%), haematochezia (n=16, 10%) and anaemia without overt bleeding (n=16, 10%). 35 (22%) required emergency endoscopic intervention. The median haemoglobin and serum urea levels at presentation were 91 g/L (IQR 72–119) and 10.7 mmol/L (IQR 6.1–18.1), respectively. 22 (14%) had acute kidney injury, of whom 8 required endoscopic intervention; while 46 (29%) had chronic kidney disease.