PTH-060 CONVERSION OF EMR TO ESD: AN OPTION TO BE KEPT IN MIND!

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Introduction Endoscopic Mucosal Resection (EMR) is a procedure applied for the treatment of most colorectal polyps. Endoscopic Submucosal Dissection (ESD) has the significant advantage of providing en bloc specimens, but it's more technically demanding, time-consuming, and the learning curve is steep.

Conversion to snare resection during difficult colorectal ESD has been described, and factors related to this have been identified. However, conversion from EMR to ESD has not been described.

Methods A 53 year old male patient was referred for rectal bleeding. A 30 mm Paris 0-Ip, Kudo IV polyp was identified on a colonoscopy, and was referred to the SPECC MDT. Polypectomy was recommended.

A flexible sigmoidoscopy was performed (Olympus Lucera Spectrum Elite 290 endoscopy system, PCF260AZI colonoscopy). There was a large polyp at the lower and mid rectum, with estimated size 5 cm. Initially it looked pedunculated, but on close inspection it was in fact sessile, although the base apparently was not very broad. The lesion was bulky and a piecemeal EMR was anticipated to be difficult, but it was still considered feasible, and arrangements for an ESD hadn't been done.

The base of the polyp was injected with a solution of GeloFusin and indigo carmine; 20 mm and 25 mm Olympus Snare Master snares were applied to attempt resection of the lesion. An ERBE VIO 200D unit was utilised. Underwater technique was utilised to encircle the whole lesion with the snare, but it was not possible. Only two small pieces of the polyp were resected. When a larger piece of the polyp was snared, it felt firm and the lesion was not cut despite using not only forced coagulation current, but also endocut, in several intervals of 5 seconds.

A decision was made to switch to ESD in the patient's best interest. No sedation had been given, only Entonox. The patient understood the indication for ESD, and agreed with proceeding.

A scissor-type knife (SB knife Junior, Sumitomo) was applied for the ESD. A soft straight distal attachment (Olympus) was utilised for the EMR, and it was maintained for the ESD.

Large vessels were pre-coagulated with soft coagulation before cutting them. The resection took 30 min for the EMR attempts, and 57 minutes for the ESD. There were no complications. The post ESD site was sutured with 4 clips. The patient was discharged home after the procedure.

Results Histopathological analysis revealed a tubulovillous adenoma with low grade dysplasia.

Conclusions ESD with a SB knife can be used as a free hand technique in cases of large pedunculated and sessile lesions in which EMR is not resolute. The importance of adequate polyp assessment in planning the best treatment strategy for colorectal polyps cannot be overstated.

PTH-061 IMPROVING BOWEL PREP AND COLONOSCOPY UNDERSTANDING WITH AN EDUCATIONAL VIDEO

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Introduction Bowel preparation (BP) is key to high quality colonoscopy. Up to 20% of colonoscopies may be limited by inadequate BP. Good quality BP is shown to increase Adenoma Detection Rate, and reduces procedure length. Understanding and adherence to instructions is associated with quality of BP. The use of visual aids can lead to improved BP. We aim to introduce an educational video as a quality improvement project and assess its acceptability and impact on patients' understanding of how to take BP for colonoscopy.

Method A video was created in collaboration with the Nottingham Trent University graphics department. The video was reviewed by a patient involvement group and doctors. Patients referred for colonoscopy were included. An initial survey of patients was conducted to assess their understanding of colonoscopy and BP. Subsequently, a group of patients referred for a colonoscopy watched the educational video and completed questionnaires. Outcome data from their endoscopy reports was also accessed to assess adequacy of BP.

Results A preliminary survey of patients demonstrated that 10/47 patients rated their understanding of a colonoscopy procedure or how to take BP as 5/10 or less on a visual analogue scale (VAS). 38% of these patients had inadequate BP, compared with 8% of the patients whose score >5/10. Subsequently 32 patients (male to female ratio 1:1) were recruited and were shown the educational video.

The mean age was 64 and the range was 49–83. 22 patients rated the acceptability and how easy it was to follow the video as 10/10. 3 rated the acceptability and how easy it was to follow the video < 5/10. 24 (75%) patients indicated that the video improved their understanding of what a colonoscopy involved, 1 indicating a decrease in understanding and the remaining 7 patients indicating no change in understanding. 24 of patients who viewed the video had a colonoscopy of whom 1 patient had inadequate BP, 4 had fair BP and 19 had good or excellent BP.

Abstract PTH-061 Table 1

Understanding of how to take BP following viewing the video	Number of patients
Improved	22/32
Remained the same	9/32
Decreased	1/32

Conclusion The majority of patients in this cohort found the video both acceptable and easy to follow and improved understanding of what a colonoscopy involved and how to take BP for the procedure. Although the sample was small and wasn't matched to controls, the outcome in terms of adequacy of BP was excellent. The data indicates that an educational video would be acceptable and could improve both understanding of

the procedure and how to take BP. A randomised study comparing patients with access to a video versus no access would confirm the benefit of standard use of this educational tool for patients.

PTH-062 **ENDOSCOPIC MANAGEMENT OF BURIED BUMPER SYNDROME (BBS) USING A DEDICATED RESECTION DEVICE: THE 'FLAMINGO SET'**

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Introduction Buried bumper syndrome (BBS) is an uncommon complication of percutaneous endoscopic gastrostomy (PEG) placement, with an incidence of 1%. Several techniques for endoscopic management of BBS have been described, given the absence of a dedicated device to date.

Methods A 94-year-old man presented with fever and PEG obstruction. A PEG had been placed in 2014 for enteral feeding in the context of dysphagia, secondary to Parkinson's disease. On examination, the cutaneous side of the PEG tract appeared erythematous and oedematous, with seepage of purulent mucus; any attempt to mobilise the PEG tube through external manipulation proved futile.

Results At upper gastrointestinal (GI) endoscopy, a 4 cm elevated area of granulomatous tissue with a central depression was identified on the proximal anterior wall of the gastric antrum, confirming the suspected diagnosis of BBS.

A 2.5 mm ball-tip, needle-type knife was initially used to incise the granulomatous tissue, allowing intra-gastric passage of a guidewire, pushed through the cutaneous aspect of the PEG tract. The use of a novel, sphincterotome-like, dedicated device, designed for radial incision of BBS-related intra-gastric granulomatous tissue (Flamingo Set, Medwork, Höchstadt, Germany) was then applied. This device was inserted over the guidewire into the stomach, through the external aspect of the partially cut PEG tube. The guidewire was subsequently withdrawn and the distal part of the Flamingo device was flexed by 180°, exposing the bow-string, sphincterotome-like, cutting wire. External traction was then applied to the Flamingo device from the cutaneous side of the PEG tract. Optimal apposition of the cutting wire and the granulomatous tissue was achieved through direct endoscopic visualisation. The overgrown tissue was then incised by a series of radial cuts until the plastic bumper was exposed. The PEG bumper and remnant of the externally cut PEG tube was then released into the gastric lumen through gentle, external manipulation. As a pre-cautionary measure, the excision site was partially closed by deployment of through-the-scope endoclips. The whole procedure was performed under conscious sedation and broad-spectrum, intravenous antibiotic prophylaxis; no immediate, early or late adverse events were encountered. A new PEG insertion was successfully achieved at an alternative site, 2 weeks later.

Conclusions To the best of our knowledge, this is the first use of the 'Flamingo Set' for BBS. Through our preliminary experience, this novel, dedicated device appears to be user-friendly, safe, quick and effective for minimally invasive, endoscopic management of BBS and warrants further study.

PTH-063 **SUSPICION OF DEEP SUBMUCOSAL INVASION DURING ENDOSCOPIC SUBMUCOSAL DISSECTION: SIGNIFICANCE OF THE MUSCLE-RETRACTING SIGN**

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Introduction Colorectal endoscopic submucosal dissection (ESD) is a well-established minimally invasive resection technique. When the so-called muscle-retracting (MR) sign is encountered during ESD, complete resection may not be feasible. The pocket creation method (PCM) allows easier recognition of the submucosal space in the context of fibrosis and MR sign. To date, both magnifying endoscopy and endoscopic ultrasound may not be able to show invasive cancer, especially for lateral spreading tumor (LST) with a large nodule. Therefore it may be difficult to predict if any MR sign is caused by fibrosis or deep submucosal invasion.

Methods Our aim was to highlight the characteristics of deep submucosal invasion during PCM-ESD. A 74-year-old man had a colonoscopy due to haematochezia and a large granular, mixed-nodular LST was identified in the proximal rectum. Endoscopic assessment of the lesion with near focus, indigo carmine and narrow band imaging (NBI) did not reveal any sign of Kudo pit pattern Vn, JNET type 3 surface findings, or any other definitive sign of intramucosal or deeply invasive cancer. For this reason we proceeded with saline-immersion therapeutic endoscopy (SITE) facilitated PCM-ESD.

Results After dissection of the distal part of the lesion, the MR sign was encountered within the submucosal pocket, underneath a large nodule. Despite continuing dissecting this severely fibrotic submucosal area using the PCM technique, increasing severity of submucosal fibrosis and repeated bleeding from convergent, irregular submucosal neovascularisation around the MR site (with an appearance akin to 'solar flares'), impeded further resection. ESD was therefore discontinued due to high suspicion for submucosal invasion. Histopathological analysis of biopsies taken from the MR area confirmed deep submucosal invasion.

Conclusions Our findings reinforce the suspicion that a flare of neovascularisation convergent onto the MR area is suggestive of deep submucosal invasion. In this scenario ESD could be discontinued and surgical options should be considered.

PTH-064 **SUCCESSFUL ERCP AND PERI-HILAR STENTING IN A PATIENT WITH SITUS INVERSUS – A UK FIRST**

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Introduction Complete situs inversus (CSI) is a rare autosomal recessive genetic abnormality (incidence of 1 in 10000 live births) in which there is left to right transposition of all viscera and dextroversion of the heart. Herein we report the first reported case in the UK of a patient with a CSI undergoing therapeutic ERCP for choledolithiasis (Cotton Grade 3).