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 though 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 The guidewire was subsequently withdrawn and the distal part of the Flamingo device was flexed by 180°, exposing the bow-string, sphincterotome-like, cutting wire.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).

Methods This case involved a 66 year old male of Indian origin with a history of CSI, Gilbert's syndrome, urticaria, angioedema, and gallstone disease. He presented with a three week history of malaise, fever, anorexia and jaundice. His liver function tests demonstrated obstructive jaundice (bilirubin 76 $\mu\text{mol/L}$, ALT 116 $\mu\text{unit/L}$, ALP 637 $\mu\text{unit/L}$). A CT identified biliary obstruction at the liver hilum. A subsequent MRCP identified the cause of biliary obstruction to be a 23 mm gallstone impacted in the common hepatic duct. An outpatient ERCP was performed with the patient in a prone position using a therapeutic duodenoscope (Olympus TJF-240) with their body turned to the right. After the duodenoscope was navigated into the stomach, it was torqued to the left which allowed the pylorus to be identified. The duodenoscope was then navigated to the second part of the duodenum. Initially a 'short scope' position was adopted but this was found to be unstable and resulted in the duodenoscope falling back into the stomach. As a result, a 'long scope' position was adopted for the remainder of the procedure.

Results In a 'long scope' position wire guided cannulation (0.035 Boston Dreamwire) was performed. A cholangiogram confirmed the MRCP findings. After a sphincterotomy was performed (Boston Dreamtome) a 10Fr $\times$ 7 cm straight plastic stent (Boston) was inserted. The procedure was uncomplicated and the patient was discharged following ERCP; post ERCP pancreatitis was not observed. The patient's liver function tests subsequently normalised.

Conclusions A PUBMED and EMBASE literature search has identified that 10 cases of ERCP have been described in patients with CSI (Hu et al 2015, Sharma et al 2018). This case, however, is the first reported case from a hospital within the UK and indeed the first ever in which video footage has been obtained during both intubation and cannulation. As per previous reports, the patient was placed prone with the endoscopist turning 180° to the right as compared to ERCP with conventional anatomy. Despite adopting this position, we found that a 'short scope' position was unstable and cannulation was achieved after a 'long scope' position was adopted. Whilst the procedure was technically challenging it was felt to be of a similar difficulty to ERCP procedures in other altered anatomical states. We hope the video footage obtained during this procedure will help other endoscopists successfully perform ERCP when faced with a patient with CSI.

PTH-065 NEEDLE KNIFE FISTULOTOMY IN ERCP: SINGLE ENDOSCOPIST'S EXPERIENCE

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Introduction Needle knife fistulotomy (NKF) is a recognised technique used for difficult biliary cannulation.¹ Various studies have shown that early usage of the technique is safe and successful when compared to persistent standard cannulation attempts.² The decision when to turn to the needle knife however is very operator dependent. We will review the data from an experienced ERCPist to see how ones decision to opt for precut may have changed over time as well as the success and complication rates that go along with it. Then using videos of previous procedures we will discuss what criteria we

look for and the techniques we use to perform the optimum fistulotomy.

Methods We reviewed all the ERCP procedures done by an experienced endoscopist in one centre over four and a half years. We looked at the reports to find out the frequency with which NKF was performed, as well as the success and complication rates.

Abstract PTH-065 Figure 1 Precuts performed over time

Results Over 55 months, one ERCPist carried out 700 ERCP's. In 110 of those procedures, NKF was performed. The majority of cases were for choledocolithiasis and stricturing disease (66 cases and 21 cases respectively). The NKF success rate in the first attempt was 83.6% (92 of the 110 cases). 56% (10) of failed cannulation had repeat ERCP, and biliary cannulation was achieved in all. The overall success rate was 92.7%. Over the given time period, we can see a general trend for an increased ratio of needle knife procedures performed per 100 ERCP's done (figure 1). 4 cases of delayed complications were encountered in total (3 cases of post-ERCP pancreatitis and 1 case of a contained duodenal perforation).

Conclusion The increased proportion of fistulotomies over time may demonstrate more confidence in the technique, and so it is more readily considered as an option in cases of difficult access. Also, it may represent an increased awareness of which ampullas are more amenable to precut rather than conventional cannulation techniques and this is something we will go on to discuss in our video presentation.

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PTH-066 CHOLANGIOSCOPIC MANAGEMENT OF PROXIMALLY MIGRATED BILIARY STENT USING A NOVEL THROUGH THE CHOLANGIOSCOPE SNARE

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Migration of biliary stent occurs in 5–10% of cases. However, proximal migration of pigtail stents is rare.