

Methods This was a retrospective analysis of patients who underwent ESD or hybrid ESD/endoscopic piecemeal resection (ESD/EPMR) of large benign rectal polyps. Details pertaining to the polypectomy were gathered and patients were asked a series of questions regarding their bowel function before and after endoscopic resection.

Results Thirty four patients underwent ESD or hybrid ESD/EPMR for large rectal polyps between January 2006 to May 2012. The median maximal polyp measurement was 62mm (range 40 – 150mm) and median circumferential involvement, 50% (range 30 – 90%). The patients had symptoms of the passage of mucous (12 patients), rectal bleeding (9) and faecal incontinence (1) before the treatment. In all cases, these symptoms resolved after the treatment. Regarding the bowel function post procedure, 16 patients (47.1%) opened their bowel less frequently, 12 patients (35.3%) the same and 6 patients (17.6%) more frequently. Eighteen patients felt that their completeness of evacuation was the same, 8 improved and 5 worsened. Almost all of the patients (33 patients, 97.1%) did not use laxatives before their polypectomy, however 14 patients (41.2%) required the regular use of laxatives post procedure. None of the cases did not require any further intervention like dilatation. There was no relationship between circumferential involvement and patients who developed a decreased frequency of defecation or who used laxatives after ESD (Mann-Whitney Test, $p = 0.567$). On a scale of 1 to 10, where 1 was extremely unsatisfied and 10 was extremely satisfied, the patients rated their ESD experience at 10 (Median, Range 7 – 10).

Conclusion ESD of large rectal polyps resulted in an improvement in symptoms of rectal bleeding and passage of mucous. It also results in a decreased frequency of defecation and an increase in use of laxatives. Functional outcomes are not related to polyp size or circumferential involvement. Patients were extremely satisfied with their ESD experience.

Disclosure of Interest None Declared.

PTH-033 A SYSTEMATIC APPROACH TO STANDARD ENDOSCOPIC SAMPLING OF BILE DUCT STRICTURES IS HIGHLY ACCURATE IN THE DIAGNOSIS OF BILIARY STRICTURES

doi:10.1136/gutjnl-2013-304907.520

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Introduction Accurate diagnosis of bile duct strictures as malignant or benign is imperative for optimal patient management, but is frequently difficult. Histological and cytological samples can be obtained at ERCP. Various techniques have been studied and reported specificities are generally very high. Sensitivities are modest and variable. The reported sensitivity is 33–57% for brush cytology and 43–81% for transpapillary histology. The yield may be increased by combining two sampling methods.

Methods Data was collected prospectively on all patients with bile duct strictures who underwent histology and cytology. Transpapillary, intraductal biopsies were obtained using a paediatric biopsy forceps (Boston Scientific, Radial Jaw 4, 2.0mm paediatric biopsy forceps, Hemel Hempstead, UK). Fluoroscopic guidance was used to selectively target the stricture. A minimum of 4 biopsies were obtained. Cytological samples were obtained using an over the wire brush (Boston Scientific, RX Biliary brush 2.1mm, Hemel Hempstead, UK). This involved multiple passes through the stricture and withdrawal of the brush in to the catheter after the final pass. On retrieval, the catheter was flushed with the cytology fixation fluid in to the cytology collection container and the brush was cut off and sent in the same container.

The sample was delivered to the lab for processing to the lab immediately after the procedure. Patients diagnosed with benign strictures had a follow up with median length of 20 months (range 4–35).

Results 96 strictures were sampled using dual modality. 70 were malignant of which 49 were in the peri-hilar and proximal CBD and 21 in distal CBD. The sensitivity in diagnosis of malignant biliary strictures was 74% with an overall accuracy for all strictures of 81%.

Histology was positive in 33/52 cases (63%) and cytology was positive in 29/52 cases (56%). Taken together, they yielded a significantly better result of 74%.

The sensitivity was higher for peri-hilar (82%) as compared to distal strictures (57%). There were no false positives. No complications as direct result of either tissue acquisition techniques occurred.

Abstract PTH-033 Table 1

Sensitivity	74% (n = 70)
Peri-hilar	82% (n = 49)
Distal	57% (n = 21)
Specificity	100%
PPV	100%
NPV	59%
Accuracy	81%

Conclusion A highly systematic approach and combination of histology and cytology offers a significant advantage in diagnostic accuracy for both malignant and benign strictures. The high yield on cytology in our study may reflect attention to detail and prompt processing in the lab. None of the techniques adopted required specialised equipment or skills and could be adopted by any ERCP unit

Disclosure of Interest O. Noorullah: None Declared, V. Lekharaju: None Declared, C. W. Wadsworth: None Declared, K. Brougham: None Declared, N. Stern: None Declared, S. Hood: None Declared, C. Kaltsidis: None Declared, M. Terlizzo: None Declared, R. Sturgess Conflict with: Advisory board member and in receipt of honoaria from Olympus UK and Boston Scientific

PTH-034 ACHIEVING NICE STANDARDS FOR ENDOSCOPIC SUBMUCOSAL DISSECTION: FIRST UK PRACTICE STUDY

doi:10.1136/gutjnl-2013-304907.521

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Introduction Endoscopic submucosal dissection (ESD) is an advanced technique that aims to resect appropriately selected gastrointestinal intraepithelial neoplasias *en bloc*, allowing precise histological diagnosis for staging and resection margin analysis. No published data from the UK exists from either tertiary referral units or DGH settings since the recent publication of ESD NICE guidelines in 2010. Such data is of paramount importance for service development and for establishing the potential role of ESD in current Cancer Service Frameworks (CSF) in the UK. Data is urgently required by NICE for stage 1 guidance revision.

Methods All patients who underwent ESD in 2009–2012 at BDGH (n = 47) were included in this study. Primary outcome measures were complication rates, resection status, 30-day readmission rates, mortality and tumour recurrence. These data were then analysed against recently published standards set by NICE.

Results Inclusions-HGD/IMC/T1 carcinoma/GIST. n = 47 (LGIT 26/UGIT 21). *En bloc* resection was achieved in 45/47

patients (95.7% vs 93% by NICE1). 41/46 patients had complete resection (R0) (89.1% vs 86.5% by NICE1). There were 2 cases of intra-operative bleeding (7.4% vs 22.6% by Oka S. *et al*), where haemostasis was achieved using triclips. There was 1 delayed bleed (2% vs 0–9% by Oka S. *et al*) requiring laparotomy. 1 perforation (2% vs 4% by NICE1) occurred requiring laparotomy for gastric repair. 2 patients (4%) were readmitted within 30 days post ESD - 1 with post laparotomy abdominal dehiscence, and the other with post polypectomy syndrome. There were no recurrence or metastases in our cohort (0% vs 10% by NICE1). [Median follow up 20.5 months/range 3–38 months). $P > 0.5$ (*ns*) for all parameters.

Conclusion These results represent first phase practise audit against NICE guidance. These data may enhance utilisation of ESD within the UK CSF as clear efficacy against nationally set guidelines is achievable. However, it is mandatory that ongoing multicentre efficacy data is collected. Should CSF accept this technique in full, with agreed tariff, a 'roll out' of a national registry and advanced training curriculum is mandatory.

Disclosure of Interest None Declared.

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PTH-035 SALVAGE ENDOSCOPIC SUBMUCOSAL DISSECTION FOR REFRACTORY POST POLYPECTOMY FIBROSIS AND RECURRENT INTRAEPITHELIAL NEOPLASIA: EXPANDING THE TECHNOLOGICAL ENVELOPE IN THE UK

doi:10.1136/gutjnl-2013-304907.522

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Introduction Submucosal desmoplasia post EMR confers the natural history of regenerative luminal healing. Index R1 or Rx dissections of colorectal neoplasia using either EMR, EPMR or simple snare polypectomy complicated by remnant or recurrent intraepithelial is clinically challenging. Formal open surgical resection or ablation is usually inevitable in this cohort. We describe, using video presentation data, the technique of primary endoscopic fibrosis divisional dissection with curative intent for recurrent or remnant intraepithelial neoplasia of the right-hemi colon post index EMR.

Methods Recurrent disease or refractory intraepithelial neoplasia was defined according to Higaki criteria. Patients were consented for progression to salvage dissection prior to endoscopy. Pre-resection peripheral margin APC 'mark out' was performed following index indigo carmine chromoscopy to delineate the lesion's horizontal axis with thermal mucosal tattoos placed 2–4 mm away from the lesion margin and within a type I crypt mucosal zone. Peripheral smi with 1/10,000 adrenaline solution was performed with 6 mm marginal circumferential 6 mm incisions made to the level of the deep submucosal layer using the straight flex knife. Dissection of the exposed submucosal desmoplastic fibrosis layer was then performed using a fixed en face IT knife distance coupled with a blunt tractional endoscopic 'tunnelling' technique. Prophylactically, sm vessels were ablated or clipped prior to tissue recovery.

Results $n = 12$ patients. Paris class LST-NG/G (6)/0-IIa (6). Median operating time 64 mins (range 34–82). Median lesion size 22mm (range 12–46 mm). Asymmetrical, partial or complete NL = 12 (100%). Perforation rate 0/12. Median hospital stay 24 hours (range 6–120).

30 day mortality 0%. R0 resection achieved in 11/12 (92%). Endoscopic recurrence rate 0% (median follow-up 18/12 (range 2–43 months). Post dissection late bleed occurred in 3/12 (25%) of the cohort all treated conservatively. There were no cases of immediate or early dissection bleeding.

Conclusion Salvage endoscopic dissection of remnant or recurrent intraepithelial neoplasia post index EMR, EPMR or conventional polypectomy is technically possible in the UK in this pilot clinical experience. Dissection is however technically demanding, is complicated by a high delayed bleeding risk and is time consuming. In an appropriately selected patient cohort however this novel therapy may negate the need for formal surgical excision which in the elderly and those with significant comorbidity becomes an attractive therapeutic modality changing the paradigm away from palliative ablative methods in those unfit for formal surgical resection.

Disclosure of Interest None Declared.

PTH-036 IS THE UK READY FOR SUB-SPECIALISATION IN ADVANCED COLONOSCOPIC POLYPECTOMY?

doi:10.1136/gutjnl-2013-304907.523

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Introduction European guidelines have proposed four levels of competency for polypectomy. The highest competence (level 4) is expected of only a small number of regionally based colonoscopists, to whom patients with large or complex polyps might be referred. We wished to explore whether such a model could be applied to current UK practise.

Methods In a UK national survey of advanced polypectomy, a number of questions were designed to reveal attitudes and beliefs underlying clinical decision-making and referral practises. The survey was directed to all BSG members and BCSP colonoscopists.

Results Respondents 268 independent colonoscopists in UK practise with a median lifetime experience of 3000 procedures. 64% were BCSP colonoscopists and 86% undertook endoscopic mucosal resection (EMR) of polyps > 20mm.

Competence Level When asked to describe the most complex polyp they would tackle, 3.4% fell into competence level 1, 31% level 2, 35% level 3 and 30% level 4. Of the 81 self-rated level 4 operators, 17% had never removed a polyp > 5cm and 32% performed ≤20 EMRs in the previous year. Only 56% of level 4 operators agreed that they would attempt any polyp where EMR was technically feasible. Others felt constrained by their own technical ability or by time and resource limitations.

A quarter of all the respondents considered that they operated close to the limit of what was technically possible by EMR but only 15 operators (5.6%) were identified who had a workload of > 50 EMRs per year and had removed a polyp > 6cm at some point in their career.

Referral behaviour 51% had referred at least one benign polyp for surgical excision in the previous year. 12% refer straight to surgery for any polyp they cannot tackle themselves. 47% had referred a polyp to a colleague for EMR (34% refer to an endoscopist within their own unit, 28% to another hospital and 12% to an expert in a different region). 70% of all respondents declared they would be happy to receive EMR referrals from a colleague.

Future directions 59% indicated support for accreditation in advanced polypectomy but only 41% wanted to see nominated EMR experts for each region. Just 18% supported the concept of an integrated national referral network for complex polyps. The proposal for 3–4 national referral centres was also unpopular.