PWE-51 LIVER BIOPSY PRACTICE IN THE ERA OF ELASTOGRAPHY – INDICATIONS, QUALITY AND OUTCOMES

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Introduction Widespread availability of serum biomarkers of fibrosis, transient elastography (FibroScan™) and non-biopsy based diagnostic guidelines have reduced the requirement for liver biopsy. As the indications for biopsy potentially contract, their interpretation may become more complex and the need for consistent, adequate sampling even more important. Furthermore, morbidity and mortality may alter as patient characteristics change. We aimed to assess indications, sampling techniques, quality of samples, complications, histopathological diagnosis and outcomes of liver biopsies in a large tertiary hepatology centre.

Methods Anonymised data relating to all non-lesional liver biopsies requested by hepatologists and performed at Guy's and St Thomas' hospital from January 2019 to December 2020 were collected. Indications, procedure, needle type, complications, histopathology reports (including noting the quality/adequacy of the sample) and final diagnosis were reviewed and analysed. All biopsies were performed by interventional radiologists and analysed at Kings College Hospital Institute of Liver Studies.

Results 125 biopsies were identified. Indications included inconclusive FibroScan™ values (n=51), abnormal imaging (n=10), uncertainty in aetiology (n=50) and miscellaneous reasons (e.g. sarcoid, Wilson's haemochromatosis etc. n=12). There was no available clinical information in 2. Percutaneous (PC) route was used in 119 cases and transjugular (TJ) in 6. Six needle types were used for the PC route and 4 types were used for TJ. 84.8% (n=106) of samples were adequate, 12% (n=15) were of poor quality and 3.2% (n=4) were inadequate for histological diagnosis. Diagnostic certainty was declared by the histopathologist in 89% (n=112). 32.5% had evidence of sample fragmentation. 91% (n=114) of samples contained adequate numbers of portal tracts for diagnosis. Main diagnosis included non-alcoholic liver disease, autoimmune hepatitis, drug induced liver disease and viral hepatitis. Fibrosis stage was F0 (N=21), F1 (n=33), F2 (n=30), F3 (n=27), F4 (n=10) and inconclusive in 4. 3.2% (n=4) of the patients had significant post procedure pain, Three were discharged following 4 hrs observation and one required admission. There were no instances of haemorrhage or pneumothorax.

Conclusions Liver biopsy remains an important tool in clinical assessment. In this cohort, a variety of needles were used, suggesting individual preferences among operators. Sample quality was satisfactory, though in a minority adequate tissue was not obtained. We noted that repeat biopsies were not requested, suggesting clinicians were able to progress their patients' management. Despite elastography, patients with minimal fibrosis and cirrhosis are still biopsied. Patients should be aware that significant pain may occur in around 3%. Further investigation into the potential benefits of needle standardisation, patient reported measures of pain and the influence of biopsy on patient management and outcome is justified.

Oesophagus

PTH-63 EOSINOPHILIC OESOPHAGITIS – OUR CLINICAL EXPERIENCE WITH ORODISPERSIBLE TABLET FORMULATION BUDESONIDE (BOT)

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Introduction The prevalence of Eosinophilic Oesophagitis (EoE) is rising. Pharmacological options were limited and practitioners have relied on proton pump inhibitors (PPI) and swallowed 'topical' steroids (TS) with limited data on efficacy. The novel orodispersible budesonide tablet formulation (BOT) has been shown to be effective in patients with EoE and approved as the first licensed oral steroid therapy in the UK. We set out to assess and present our clinical experience with BOT, assessing duration of therapy and response rates.

Methods We performed a retrospective cohort analysis of 40 patients diagnosed with EoE. Demographics, pharmacotherapy (PPI, TS, and BOT), duration and response to treatment were reviewed. Response was based on clinical evaluation by Gastroenterologists with an interest in EoE. Fisher's exact test was used for comparing treatment efficacy.

Results 40 cases of EoE were identified. Basic demographics and symptoms at index presentation are shown in Table 1.

97.5% (n=39/40) received PPI at initial follow up, one was asymptomatic. In the treated group, 38.4% (n=15/39) required escalation to TS. 38.4% (n=15/39) was escalated to BOT either directly following PPI with or without prior TS therapy. Ten of these patients had their follow up assessment. 80% (n=8/10) of patients had a good response to BOT.

Abstract PTH-63 Table 1

Median age at diagnosis (years[SD])	38[14.32]
Male (n/N(%))	26/40(65.0%)
Ethnicity	
- White	20/40(50.0%)
- Mixed-White & Asian	2/40(5.0%)
- Mixed-White & Caribbean	1/40(2.5%)
- Asian	1/40(2.5%)
- Afro-Caribbean	1/40(2.5%)
- N/A	15/40(34.4%)
Atopy (n/N(%))	
- Asthma	9/40(25.8%)
- Hay fever	5/40(12.5%)
- Eczema	5/40(12.5%)
Symptoms at index presentation	
- Dysphagia	36/40(90.0%)
- Food bolus obstruction	19/40(47.5%)
- Reflux	13/40(32.5%)
- Chest pain	12/32(37.5%)
- Vomiting	11/32(34.4%)
- Odynophagia	7/40(17.5%)
- Weight loss	3/40(7.5%)

87.5% (n=7/8) required repeated courses (≥ 12 weeks). One responded after an initial six weeks course. Subgroup analysis within the BOT cohort showed no difference between response rates in patients who had prior TS therapy and those who went direct to BOT from PPI (83.3% vs 75%, $p>0.05$).

Conclusions Our data suggests a high clinical response rate in patients receiving BOT in line with the results of the Eos-1 trial (85% remission rate following 12 weeks treatment). Optimal timing with regards to treatment escalation requires further evaluation but our data suggest that prior TS use is not associated with a difference in response rates with BOT. Prospective analysis with clinical-histological and endoscopic assessment is superior but currently challenging due to COVID-19. Clinical evaluation could be enhanced by using a standardised questionnaire for EoE but this will require further evaluation.

PTH-64 AN AUDIT OF BRAVO CAPSULE USE IN A TERTIARY REFERRAL CENTRE

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Introduction Wireless pH monitoring is an increasingly used modality in the assessment of gastro-oesophageal reflux disease (GORD). BSG guidelines recommend the use of wireless pH monitoring in patients who have symptoms suggestive of GORD but who have either previously been intolerant, or would likely be intolerant, to catheter-based pH monitoring. Evidence has shown that wireless monitoring using the Bravo capsule system is better tolerated than conventional catheter-based techniques, meaning less disruption of daily activities for patients. This better tolerability allows for longer periods of monitoring and potentially higher diagnostic yield.

Methods We performed a retrospective audit looking at the use of the Bravo capsule at our centre. The objective was to look at the adherence to the BSG guidelines and to collect relevant clinical information on patients referred to help inform future decisions on how to most effectively use the service. Data was collected using electronic patient records. We looked at results over a 20-month period comprising 84 patients in total.

Results We found the Bravo capsule to be an extremely well-tolerated procedure with only 1 of our 84 patients not tolerating the capsule insertion. Diagnostic yield was high, with 84% of patients having DeMeester scores above 14.72 and 78% having a total reflux time over 4.2%. 49% of patients were referred for consideration of surgery whilst the remainder were managed medically. The majority of patients (78.6%) had previously been intolerant of, or had borderline results from, catheter-based pH testing prior to being referred for the Bravo capsule which is consistent with BSG guidance. Most patients had an OGD prior to referral (91.7%). Of these patients 68% showed either a hiatus hernia, oesophagitis or peptic ulcer whilst 30% were normal. In our subgroup analysis we found that patients referred with a cough had a significantly lower DeMeester than those referred for other indications. We also found that patients with a previously nor-

mal catheter-based monitoring test had a lower mean DeMeester.

Conclusions Overall, our results showed that referrals for capsule-based pH monitoring were generally being performed according to BSG guidance. Our subgroup analysis should help inform further study into which patient groups benefit most from Bravo capsule referral.

PTH-65 EOSINOPHILIC OESOPHAGITIS IS OFTEN NOT EXCLUDED IN EMERGENCY FOOD-BOLUS OBSTRUCTIONPRESENTATIONS – A MISSED OPPORTUNITY

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Introduction Oesophageal food bolus obstruction (FBO) presents as an emergency and frequently requires endoscopic removal of the bolus. Eosinophilic oesophagitis (EOE) is an atopic disorder that typically presents with food bolus obstruction. Guidelines for the diagnosis of EOE recommend six oesophageal biopsies from at least two sites. Early detection and treatment of EOE can prevent significant morbidity.

The aim of this study was to examine local practice in excluding EOE in those presenting with FBO.

Methods We conducted a retrospective review of acute FBO presentations in those over 16 years of age at Sandwell & West Birmingham NHS trust between 2014 and 2020. Cases of foreign body in the oesophagus were identified using the International Classification for Disease (ICD-10) code T18.1. Oesophageal cancers, severe reflux oesophagitis, peptic strictures, and foreign bodies other than food were excluded. Patient electronic records were examined for endoscopy findings and adherence to guidance on biopsies to exclude EOE.

Results 119 patients were identified. 38 (32%) had cancer, a peptic stricture, severe oesophagitis or a foreign body other than food or incomplete data and were excluded. 81 patients were examined (median age 58 (IQR 44-72), 78% male): 55 (68%) underwent endoscopy - 71% at presentation and 29% within 6 months. Of 26 patients without an index endoscopy, 19 (73%) were admitted under ENT and only one of these patients had a subsequent endoscopy and biopsies.

In those undergoing endoscopy at presentation, 23 (59%) had oesophageal biopsies taken (median 4 (IQR 2-6) biopsies), but only 6 (26%) were performed according to guidelines - 59% had multilevel but too few biopsies, while 41% had only single level biopsies. Repeat endoscopy was arranged for 5 (13%) patients who did not have biopsies taken at index endoscopy but only two had biopsies taken then. In total, only 14% of patients who had biopsies taken at index or follow-up endoscopy were in line with guidelines. Six (10%) patients met diagnostic criteria for EOE.

Conclusions The diagnostic yield for EOE was high at 10% in this FBO cohort as expected. However, both undertaking endoscopy (particularly after ENT admission) and the recommended biopsies to exclude EOE were inconsistent. Significant improvements in the management of FBO are needed to prevent missed EOE diagnoses.