Posters

Endoscopy

PTU-1 IMPACT OF THE FIRST COVID-19 WAVE ON ERCP PERFORMANCE IN A SINGLE UK ENDOSCOPY UNIT

Eyad Gadour*, Mutwakil Musharaf, Siddera Hafeez, Yosuf Shafiq, Dili Agu. *University Hospitals of Morecambe Bay NHS Foundation Trust, Lancaster, UK*

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Introduction British Society of Gastroenterology (BSG) recommended that the endoscopy units to perform ERCP during the COVID-19 pandemic for obstructive biliary pathologies in emergency. We aim to assess the local performance of ERCP during the COVID-19 first wave at our local endoscopy centre.

Methodology All ERCP procedures performed from January 2020 to Jun 2020 were retrospectively assessed and compared with procedures performed between January-Jun 2019 at Royal Lancaster Infirmary. Indications of ERCP, success rate and complications were studied separately. Olympus reporting system was used for ERCP reporting. Chi-Square and Fisher's test were used in SPSS data analysis.

Results 279 ERCP were included in this study; with 168 and 111 performed during the first 6 months of 2019 and 2020 respectively. 51% were female (n=144) whereas 135 male patients. The main indication was recorded is Common Bile Duct (CBD) stones 68.8% (n=115) in 2019 and 59.4% (n=66) during the first wave of COVID-19 in 2020, followed by Cholangitis (8% n=15 vs 14% n=16). Success therapeutic rate during the first COVID-19 wave was 78.3% (n=87) in comparison to 87% (n=146) in the previous year ($p = 0.015$). No recorded ERCP related complications for study period in 2019 however, we have recorded 16.2% complications among the study group of 111 procedures (n=18) ($p = 0.003$). Them complications were as follows; Perforation 5% (n=6), bleeding 5% (n=6), post-ERCP pancreatitis (PEP) 4% (n=5) and one case of mortality (0.9%). The ERCP complications during the first wave of Covid-19 (M=4.5, SD=2.83, n=5) were higher than post ERCP complications last year (M=0, n=5). This difference was significant, $t(6)=2.11$, ($p = 0.004$).

Abstract PTU-1 Figure 1

Conclusion First wave of COVID-19 had a statistically proven negative impact on the expected standards of ERCP performance in our unit. Although the complication rate was significantly higher during the first wave of COVID-19, yet, cases' difficulty and ASA (American Society of Anaesthesia) status were not assessed on an individual basis. We have now included both, ASA status and case difficulty, in our endoscopy selection process. We recommend adding the complexity of the cases and ASA to the local and national recording database. This study is the first study of from UK based hospitals to our knowledge.

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PTU-2 CORRELATION BETWEEN ENDOSCOPIC AND HISTOLOGICAL FEATURES IN CHILDREN AND ASSOCIATION WITH CLINICAL OUTCOMES

¹Mara Popescu*, ¹Badra Farah, ¹Ifrah Hasan, ¹Zaynah Qamar, ¹Junaid Naveed, ^{1,2}Mohamed Mutalib. ¹King's College London, London, UK; ²Evelina London Children's Hospital, London, UK

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Introduction Biopsies are routinely obtained in paediatric endoscopies to avoid repeated invasive procedures and to add histological information. The value of this approach and its effect to clinical outcomes is not certain.

Methods Retrospective review (2014-2020) of first diagnostic endoscopy/colonoscopy in children (<18 yrs), histology, indications and clinical outcomes (symptoms resolution/discharge from hospital follow up) at 6 months post procedure were collected.

Repeat and therapeutic endoscopies were excluded.

Chi square, phi & Pearson's correlation, odd ratio and relative risks were calculated.

Results 349 children were included, 48.8% were females, mean age 10.5 (± 4.1). 67.5% were OGDs and 32.5% were OGD/Colons. Indications were abdo pain 34.9%, vomiting 15.8% diarrhoea 13.8%, rectal bleeding 9%, coeliac 8.6%, constipation 10.1% and reflux 7.7%. 80.4% of OGDs and 55.8% of OGD/Colons were endoscopically normal. 60.4% of OGDs and 49.6% of OGD/colons were histologically normal. Phi correlation between endoscopies and biopsies were 0.68 $p < 0.001$ (strong positive correlation - odds ratio 165.3 95% CI 39.5 – 692.1). The positive predictive value of abnormal endoscopy identifying abnormal biopsies was of 97.9%. Its negative predictive value when both were normal was 77.9%.

37% of children improved and were discharged from follow up within 6 months of procedure (37.9% OGDs and 35.4% OGD/Colons). 40% of normal OGDs and 47.6% of normal OGD/Colons were discharged. 82.3% were discharged after 2 clinic visits.

There was a negligible (phi 0.17 $p < 0.005$) correlation between endoscopy and discharge at 6 months (odds ratio 2.29, 95% CI 1.35-3.89). A weak (phi 0.29, $p < 0.001$) correlation between histology results and discharge (odds ratio 3.73, 95% CI 2.3-6.04). And a very strong positive

correlation between number of clinics prior to endoscopy and the time to endoscopy (r 0.83 p < 0.001)

There were no reported complications.

Conclusions In this study, most OGDs and about half OGD/Colons are endoscopically and histologically normal. Endoscopic features strongly correlate with histology, questioning the need for routine biopsies and a potential cost saving measure. Negative endoscopies appear to offer reassurance and allowed almost half the children to be discharged from hospital follow up. This is the first study to look at the value of normal endoscopy on clinical outcomes of paediatric patients.

PTU-3 ENDOSCOPIC PALLIATION AND PROGNOSTICATION OF MALIGNANT HILAR BILIARY STRICTURES: A SINGLE CENTRE EXPERIENCE

Wei On*, Muhammad A Saleem, Vinod S Hegade, Matthew T Huggett, Bharat Paranandi, Simon Everett. *Leeds Teaching Hospitals NHS Trust, Leeds, UK*

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Introduction The optimum approach to palliation of malignant hilar biliary strictures (MHBS) is unclear. National UK Hospital Episode Statistics data demonstrates 30-day mortality of > 20% following endoscopic and percutaneous stenting.^{1,2} We aimed to describe outcomes and predictive factors in patients undergoing ERCP and stenting for MHBS in a single tertiary hepatopancreatobiliary centre.

Methods All patients undergoing index palliative endoscopic stenting for MHBS from February 2015 to September 2020 were identified from a prospective database. Cross-sectional imaging was reviewed and stenting intention planned (left or right unilateral; bilateral) to optimise drainage. All patients received single dose antibiotic prophylaxis. Glasgow Prognostic Score (GPS, a validated tool for prognostication in various malignancies calculated with a 3 point scale based on serum albumin and CRP) was calculated retrospectively.

Results 95 patients (53 male, mean age 70 yrs (range 30-92)) were included. Commonest aetiology was cholangiocarcinoma in 42.7% followed by metastatic hilar obstruction in 33.7%. Metal stents were placed in 87.4%, plastic in 10.3%, and both in 2.3%. Stenting intention was achieved in 83.2% (84.6% unilateral intent and 81.4% bilateral intent). Clinical success (reduction of serum bilirubin to $\leq 50\%$ its original value within 30 days) was achieved in 84.8%. 30-day adverse event rate was 31.6%, (24.2% cholangitis). 30-day mortality was 24.2%; mortality stratified by GPS (available in 89/95) was: 0% in GPS0 ($n=4$), 27.8% in GPS1 ($n=18$) and 25.4% in GPS2 ($n=67$). Neither serum albumin (<35 g/L vs ≥ 35 g/L; 24.4% vs 26.7%, $p=0.85$) nor CRP (<10 vs ≥ 10 mg/L; 16.7% vs 26%, $p=0.49$) were significant predictors of 30-day mortality.

Conclusion Despite high technical and clinical success, short term mortality is high in this group of patients. GPS, albumin and CRP do not predict outcomes. Further research to optimise patient selection for biliary intervention and strategies to reduce post-procedural cholangitis is warranted.

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PTU-4 PROSPECTIVE VALIDATION OF THE EDINBURGH DYSPHAGIA SCORE IN SOUTH-EAST LONDON

¹Miriam Harley*, ¹Lucia Yin, ²Hermon Amanuel, ²Sebastian Zeki, ³Jale Burch, ³Mayur Kumar, ⁴Giles Walker, ⁴David Dewar, ¹Bu'Hussain Hayee. ¹King's College Hospital NHS Foundation Trust, Denmark Hill, London, UK; ²Guy's and St Thomas's NHS Foundation Trust, London, UK; ³Princess Royal University Hospital, London, UK; ⁴University Hospital Lewisham, London, UK

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Introduction Although dysphagia should be considered a high-risk symptom for cancer referral pathways, the yield of endoscopy for cancer is currently <5%. Even prior to the COVID-19 pandemic, this was a significant burden for endoscopy units and subjected patients to inappropriate concern at being referred and investigated for suspected cancer. The BSG endorsed use of the Edinburgh Dysphagia Score (cut-off 3.5) to target endoscopy for those at highest risk,¹ based on previously published results².

Methods Use of the EDS was agreed as a service addition during the COVID-19 recovery period in SE London. All patients referred for dysphagia on the suspected cancer pathway in four acute Trusts were contacted either prior or on arrival in the endoscopy unit to complete the EDS, but the result did not alter the intended pathway (ie. all patients still completed endoscopy). Patients were then followed to final or working diagnosis as determined by the direct care team. As the EDS was primarily designed to prioritise for cancer diagnosis, this was the primary outcome measure. All other diagnoses were recorded and considered 'significant' if felt to be the cause of the patient's presentation. Data on ethnicity was collected to ensure the reliability of the EDS in diverse patient groups found across SE London.

Results 240 patients (117F; mean age 55.7 ± 14.7 y; $n=112$ (46.7%) non-White British) completed their investigation pathway with 20 (8%) cancers diagnosed. 125 reported EDS <3.5 and none had upper GI cancer, while all 20 cancers occurred in the $EDS >3.5$ group ($n=115$; 17.3%; median score 8 (7-9)). Significant diagnoses were found in 35 patients (28%) with $EDS <3.5$ and 48 (41.7%) in the >3.5 group.

Conclusion The EDS cut-off of 3.5 had a 100% negative predictive value in this new prospective cohort and would have resulted in a more-than-doubling of 'hit-rate' for diagnosis of cancer. The rate of significant diagnoses in the <3.5 cohort emphasises that investigations are still required, but adoption of the EDS could be used to safely defer or divert patients, avoiding inappropriate use of suspected cancer pathways.

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PTU-5 EFFICACY OF CHOLANGIOSCOPIC DELIVERED ELECTROHYDRAULIC LITHOTRIPSY IN A TERTIARY REFERRAL UNIT

Andra Caracostea*, Luke Lake, Sreelakshmi Kotha, Ben Warner, Terry Wong, Philip Berry. *Guy's And St Thomas' Hospital, London, UK*

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