Conclusions Local performance in percutaneous hepatic biopsy is safe, with low complication rates. Using the guidelines from the British Society of Gastroenterology, the Royal College of Radiologists and the Royal College of Pathology, we identified areas for improvement such as using recommended needle size and increasing liver biopsy size for diffuse parenchymal disease. These findings provide a basis for ongoing local quality improvement, and a framework on which other general hospitals can structure quality improvement whilst contributing to the evidence-basis for UK-wide guidelines.

Education & training

PTU-78 GI AND NON-GI MANIFESTATIONS OF COVID-19 DURING FIRST WAVE OF THE PANDEMIC AT DARLINGTON, UK

^{1,2}Anjan Dhar*, ²Alexander Newman, ²Vikki Rand. ¹County Durham and Darlington Nhs Foundation Trust, Darlington, UK; ²School of Health and Life Sciences, Teesside University, Middlesbrough, UK

10.1136/gutjnl-2021-BSG.378

Anjan Dhar^{1,2}, Alexander Newman², Vikki Rand²

Department of Gastroenterology¹, Darlington Memorial Hospital and School of Health and Life Sciences², Teesside University, UK

Background Gastrointestinal (GI) manifestations of COVID-19 have been increasingly reported from many centres but it is not clear as to whether the presence of GI manifestations influences the outcomes of COVID-19. The data from the UK is still emerging and there is significant variability between the North of England and the rest of the UK.

Aim of this study DarCoVE was a single centre epidemiological study initiated over a 3 week period during the peak of the first wave of the COVID-19 pandemic in the United Kingdom. This prospective cohort analysis evaluated the GI and non-GI manifestations of the disease and produced a multivariate analysis of prognosticators for COVID-19.

Methods Consecutive patients admitted with fever, cough or shortness of breath to the Acute Medical Admissions Service of Darlington Memorial Hospital between 26 March 2020 – 12 April 2020 were recruited to an electronic database, and divided into two cohorts: RT-PCR positive for SARS-CoV-2 (COVID+) and negative (COVID-). Demographic parameters, underlying co-morbidities, GI and non-GI symptoms, BMI, haematological and biochemical laboratory parameters, chest radiology, need for supplemental oxygen, need for high dependency and intensive care treatment, length of hospital stay and mortality were recorded. Univariate survival analysis was performed by Cox proportional hazard model in R, multivariate analysis was done by forward selection model, cumulative survival by Kaplan-Meier method using log-rank test.

Results 275 patients formed the dataset for analysis, 130 COVID+. Median age of COVID+ was 70(range 23-95yrs), 63% were over age 65yrs, M:F=1.28. 73% had at least one co-morbidity, diabetes commonest. Median BMI 29.7 (range 13.9-44.9). 60.8% patients had a BMI>30, compared to UK average of 10.9% (p<0.001). GI manifestations included: diarrhoea in 10.1%, vomiting 13%, abdominal discomfort 9.4%, loss of appetite 5.7%, abnormal liver functions 37%, mean

ALT 52.4 IU/L, ALT >150 in 5.1%. Of 43 clinical and biochemical factors investigated for prognostic value, 9 factors were associated with outcome at p<0.05 with cough and diarrhoea associated with lower risk of death compared to the other 7 factors. On multivariate analysis, high frailty score > 5, worst oxygenation SpO₂ < 93%, platelets < 100 x 10⁹/L and immunocompromised were poor prognosticators. None of the GI manifestations co-related with risk of death in this analysis, with a trend for ALT >150 to be associated with higher mortality. Overall mortality was 30.8% compared to UK national mortality of 26%, with ITU mortality higher at 37%.

Conclusion This study has shown a regional variation in the outcome of COVID-19, with slightly different prognosticators. GI manifestations continue to be significant in COVID-19, with a trend seen with high ALT. The data from this analysis will help management in future pandemics.

PTU-79 DEVELOPMENT OF A VIRTUAL REALITY TRAINING CURRICULUM FOR ERCP

^{1,2}Yousef Khoulil*, ^{1,2}Karim Belhaj, ³Jad Khoury, ^{1,2}Bijendra Patel. ¹Barts Cancer Institute, London, UK; ²Queen Mary University of London, London, UK; ³University Hospitals of North Midlands NHS Trust, Stoke-on-Trent, UK

10.1136/gutjnl-2021-BSG.379

Introduction Assessment of Endoscopic skills involved in performing Endoscopic Retrograde Cholangiopancreatography (ERCP) in procedural environment is complex. Tutors and experts emphasize the need to develop and use precise and significant assessments measuring tools that are valid for evaluating trainees' progress in obtaining essential gastroenterology-related procedural skills. The purpose of this research was to develop a structured evidence-based virtual reality training curriculum and set a proficiency performance benchmark for a set of objective metrics of endoscopic skills during ERCP procedures using the Simbionix GI Mentor 2 Simulator. Our second aim of the study was to form a face and construct validity of the simulator for the ERCP module to show significant differences between competent and non-competent operators in that module.

Keywords: *Simbionix, GI Mentor 2, ERCP Module, ERCP training, Simulation, ERCP simulators, Benchmark, Virtual Reality, Training curriculum*

Materials and Methods In this study, a total of 39 participants were divided into three groups according to their level of experience and number of endoscopies performed in their career (Novices, Intermediate, and Experts). They were required to perform ERCP procedure, case number 2 in Module 1 in the GI Mentor 2 Simulator, and upon completion of the study, they were asked to fill a questionnaire about the simulator, simulation in general, and their previous experience. The time taken for task completion, number of papillary contacts before cannulation, number of cannulation to the Pancreatic Duct, and other metrics calculated from the simulator along with the questionnaire results were collected and compared between the groups. The first group consisted of novices; medical students, foundation doctors, and core trainees, with no previous knowledge or exposure to ERCP or endoscopic procedures.