P006

ACUTE ON CHRONIC LIVER FAILURE (ACLF) DURING COVID-19; SINGLE UK BASED HOSPITAL EXPERIENCE

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Introduction In patients with known liver disease, acute decompensation in association with organ failure due to acute liver insult is known as Acute on Chronic Liver Failure (ACLF).¹ We aim to identify and assess the presence of ACLF during the first COVID-19 wave and the main insulting agent. **Methodology** We retrospectively assessed all patients who had been admitted to our hospital with liver pathology between January 2020 to Jun 2020. Blood tests, radiological images, histological results, and endoscopy reports were electronically retrieved. Patients were divided using Child-Pugh liver cirrhosis scoring, MELD and UKELD.² Fisher's test, Chi-square and SPSS used in data analysis.

Results Total number of liver admissions 194 during the study period of 2020. 145 were males (74.74%) and 25.2% were females (n=49) with 156 patients above fifty years (80.41%) (p= 0.0028). Thirty-three of them had variceal bleeding (n=17) and sixty-two had normal gastroscopy (31.9%) whereas ninety-nine did not have gastroscopy (OR=1.61; 95%CI =1.9; 2.852, p= 0.0024). During the study period, 36.08% of the studied individuals had Child-Pugh score of (A and B) (n=70 each) with only fifty-four who had Child-Pugh (C) liver cirrhosis (n=54), p= 0.008. Acute on Chronic Liver Failure (ACLF) was identified in eight patients (4.12%), while ninety-one had decompensated liver disease (46.9%) and (51.4%) had compensated liver cirrhosis (OR=1.05; 95%CI=0.51; 3.05, p= 0.015). Although 96.9% had Alcoholic hepatitis (n=188) as the cause of ACLF, 3.1% had other causes (p= 0.0019). Interestingly, 7.7% had (MELD score higher than 40) (n=15) and 12.8% had UKELD score of more than 49 (n=25) (OR=2.90; 95% CI=3.99, p=.005).

Conclusion Few numbers of patients had ACLF during the first COVID-19 wave however majority of them had alcohol hepatitis as main trigger. We recommend a robust community education programme to help reducing this phenomenon especially during the stressful times.

REFERENCES

1. Hernaez R, Solà E, Moreau R, et al. Acute-on-chronic liver failure: an update. *Gut* 2017;**66**:541–553.
2. Millson C, Considine A, Cramp ME, et al. Adult liver transplantation: a UK clinical guideline - part 1: pre-operation. *Frontline Gastroenterology* 2020;**11**:375–384.

P007

A COMPREHENSIVE REVIEW OF DRUG-INDUCED LIVER INJURY IN COVID-19 PATIENTS; WHAT DO WE KNOW?

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Introduction Liver impairment was seen in 60% of cases of COVID-19.¹ Drug induced Liver Injury in COVID-19 patients has not been thoroughly reviewed yet.² We aim to study this phenomenon and test the available data.

Methodology Comprehensive retrospective review was conducted to see the drug-induced liver damage due to COVID-

19. One author was assigned to do systematic search from the Advanced Cochrane library, and PubMed from all reported studies and data from December 2019 to December 2020. Search keywords were COVID-19 and liver, COVID-19 and liver injury, SARS-CoV-2 and liver, SARS-CoV-2, and liver injury. Results were checked and reviewed using SPSS version 27.

Results A Single-Centre Cross-Sectional Study, Cai Q, et al. 2020, 417 patients reported the association of raised liver tests with liver injury and severity of pneumonia. Abnormal liver tests including AST, ALT, and GGT were reported in 76.3% of patients and 21.5% acquired liver injury during admission. Liver enzymes were more prominently high during hospital stay over 3ULN (upper limit units), specifically ALT and GGT 37% and 41% (p = 0.006) respectively whereas AST and TBIL was raised up to 20% and 10% (p = 0.002). Retrospective case series of 113 deceased patients, Chen T, et al. 2020, analysed to understand the risk factors. All 113 deceased received treatment of Antiviral therapy Eighty-nine (79%), Glucocorticoid therapy Ninety-nine (88%), Antibiotics 105 (93%), Intravenous immunoglobulin therapy 39% (n=44), Interferon inhalation 22% (n=22), Oxygen treatment 113 (100%) including high flow nasal cannula 68% (n=77). Lopinavir and ritonavir were reportedly linked with COVID-19 associated liver injury whereas, in this retrospective analysis few deceased cases 89; 79% (p = 0.009) received monotherapy or combined treatment of oseltamivir, arbidol, or lopinavir and ritonavir.

Conclusion Lopinavir and ritonavir have been associated with liver injury development in COVID-19 patient. Elevated AST levels with the use of antifungals. Drug-induced liver injury in COVID-19 patients is a complex process and more critical research needs to be conducted.

REFERENCES

1. Gadour E, Shrawani K, Hassan Z. Covid-19 induced hepatitis (CIH), definition and diagnostic criteria of a poorly understood new clinical syndrome. *World J Gastroenterol, Hepatol and Endoscop* 2020;**12**(2):1–6.
2. Cai Q, Huang D, Yu H, Zhu Z, Xia Z, Su Y, et al. Characteristics of liver tests in COVID-19 patients. *J Hepatol* 2020. <http://dx.doi.org/10.1016/j.jhep.2020.04.006>

P008

HEPATOCELLULAR CARCINOMA SURVEILLANCE IN PATIENTS WITH LIVER CIRRHOSIS: ARE WE FOLLOWING THE GUIDELINES?

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Introduction The British Society of Gastroenterology (BSG) recommends, if HCC surveillance is offered, 6 monthly ultrasound-scan with serum AFP.¹ We aim to evaluate our screening practice in liver cirrhosis patients and compare it with the BSG guidelines.

Methodology Retrospectively, all patients with liver disease who admitted to gastroenterology ward between January 2020 and Jun 2020 at Royal Lancaster Infirmary were assessed. Stages of liver cirrhosis were taken into consideration with the presence of decompensated liver disease signs and the underlying cause of liver cirrhosis.² Data collected from Electronic-Patients Record included any blood test, ultrasound, and