IDDF2020-ABS-0168 PREVALENCE OF ELEVATED LIVER ENZYME IN COVID-19 AND ITS ASSOCIATION WITH DISEASE OUTCOME

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Background Coronavirus Disease 19 (Covid-19) had previously been thought to affect mainly respiratory organs. Recent studies had shown that this disease might impact another organ as well, including the liver. Coronavirus has recently been found to be able to bind angiotensin-converting enzyme 2 (ACE2) on cholangiocytes, Leading to cell dysfunction and inflammatory response leading to liver injury. Previous studies had shown that abnormal liver function can be detected in 14% to 53% of Covid-19 cases and was related to increased risk of mortality. We aim to evaluate liver enzyme abnormality in Covid-19 patients and its association with disease outcome.
Methods We conducted a retrospective analysis of all confirmed Covid-19 cases from hospitals of Siloam Hospital Group in Indonesia from 6 March until 15 July 2020. Data with unavailable liver enzyme were excluded.
Results We collected data from 266 patients with positive rt-PCR for Covid-19. A total of 81 patients (30.5%) had elevated liver enzyme on admission, with abnormal liver enzyme was defined as serum Alanine Aminotransferase (ALT) value >35 IU/L. Median ALT was 19 IU/L in the normal ALT group and 52 IU/L in the elevated ALT group. Patients in both groups had similar characteristics in age (median 44 vs 47-year-old) and sex distribution (male percentage 69.1% vs 46.5%). The total mortality rate from all patient was 8.3%. Risk of mortality was higher in patients with elevated ALT on admission compared to those with normal ALT (11.1% vs 7.0%, OR: 1.65, 95% CI: 0.67–4.04, p: 0.266) but this increase is not statistically significant. Patients with elevated ALT also had a statistically significant higher risk of Intensive Care Unit admission (21.0% vs 8.6%, OR: 2.81, 95% CI: 1.34–5.88, p<0.01). The average length of stay was similar between both groups (median 11 days vs 11 days, p: 0.612).
Conclusions Elevated liver enzyme on admission could be found in a significant proportion of Covid-19 patients and was associated with non-statistically significant increased risk of mortality.

IDDF2020-ABS-0200 IMPACT OF RISING PREVALENCE OF METABOLIC COMORBIDITIES ON ACCURACY OF HEPATOCELLULAR CARCINOMA RISK SCORE IN CHRONIC HEPATITIS B PATIENTS RECEIVING ANTIVIRAL THERAPY: A TERRITORY-WIDE COHORT OF 31,953 TREATED PATIENTS

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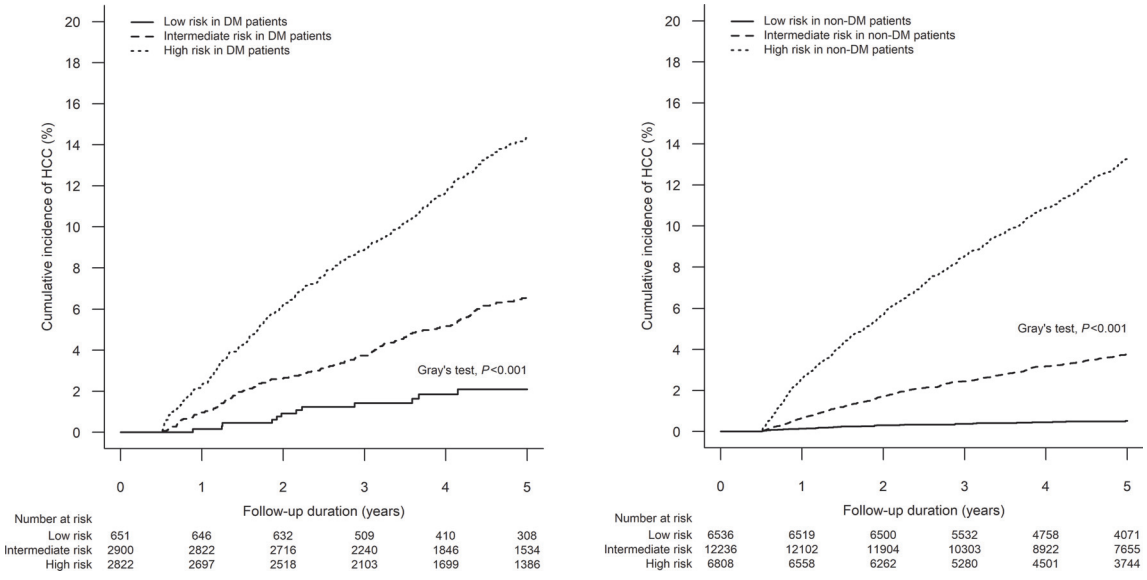
Background Patients with chronic hepatitis B (CHB) are getting older with the rising prevalence of metabolic comorbidities. We examined its impact on the performance of PAGE-B score among treated CHB patients.
Methods Adult CHB patients who had received entecavir or tenofovir for at least 6 months in 2005–2018 were identified in Hong Kong. Diabetes mellitus (DM), hypertension and dyslipidaemia were identified based on diagnosis codes, laboratory measurements, and medication uses. Performance of PAGE-B score on 5-year HCC prediction was assessed by area under the time-dependent receiver operating characteristic curve (AUROC), and the score's cut-off values were evaluated by survival analysis.
Results Of 31,953 identified CHB patients, there was a trend of rising prevalence of metabolic comorbidities over the three periods (2005–2009, 2010–2014, and 2015-June 2018): hypertension 34.2%, 40.3%, and 43.0%; DM 15.2%, 20.0%, and 21.6%; and dyslipidaemia 46.6%, 55.7%, and 62.5%, respectively (all $P<0.001$). The AUROC (95% CI) of PAGE-B score to predict HCC at 5 years was comparable across the



Abstract IDDF2020-ABS-0200 Figure 1 Cumulative incidence function of hepatocellular carcinoma (HCC) in chronic hepatitis B patients on antiviral therapy with and without diabetes mellitus (DM) in different risk groups of PAGE-B score