

00257 Virtual Monitoring for Chronic Stable Hepatitis B Patients on Treatment Is Safe – A Randomised Controlled Study in Singapore General Hospital (SGH)

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Aims: Chronic Hepatitis B (CHB) can progress to liver cirrhosis and cancer and causes significant burden at specialist outpatient-clinic. CHB patients on nucleoside analogue (NUC) need long term regular follow-up. This study aims to investigate the safety of Virtual-Monitoring-Clinic (VMC) in following stable CHB patients on NUC.

Methodology: Well compensated and asymptomatic patients on NUC and follow up at SGH were randomised to VMC by trained nurse clinicians alternating with doctors' clinic every 6 months or continued regular follow-up by doctors. Patient adherence was measured with medication possession ratio (MPR) for NUC. Morisky Medication Adherence Scale-8 (MMAS) questionnaire was completed at the time of enrollment. Safety was measured by MPR of NUC at 2 years of follow-up and virological breakthrough due to non-adherence.

Result: In this ongoing study, as of May 2018, 134 subjects completed 1 year follow-up, 65 and 69 patients in VMC and control group respectively. At time of recruitment, mean age was 60.6 years old with 95.5% Chinese and 64.9% males. Age, gender, race, education level and financial status were similar in both groups. Mean MPR was 0.85 and 0.81 in VMC and control group respectively ($p=0.436$). Majority of patients, 54 (83.1%) in VMC and 54 (78.3%) in control had $MPR \geq 0.8$ ($p=0.519$). The high patient adherence corroborated with MMAS=8 in 51.5% of all study patients. Fifty-nine (90.7%) in VMC and 59 (85.5%) in control self-reported to moderate - high adherence (MMAS > 6) and patient adherence to NUC according to MMAS was no difference in VMC and control group ($p=0.571$). Clinical outcomes seen were Hepatocellular carcinoma in 1 (1.5%) in VMC and 4 (5.8%) in control group. No virological breakthrough observed in this study.

Conclusion: VMC is a viable and safe clinical model in monitoring stable Hepatitis B patients without compromising patient adherence and safety.