**30th Medical Research Conference -
Interdisciplinary Collaboration, Innovation and Technology Transfer**

**Abstract Form**

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| **Title:** |  |
| **Authors & Affiliation (please underline the name of the presenting author)** |
| **Introduction** **(state specific objectives and provide background information on the study)** |
| **Methods (describe the methods used, including study design and patient sample, if applicable)** |
| **Results** **(summarize the obtained results)** |
| **Conclusion (state the conclusions reached)** |
| **Acknowledgment** (give credit to the funding source(s) for the research project, if any) |

**Sample Abstract**

**(Reference)**

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| **A prospective one-year follow-up of glycaemic status and C-peptide levels of COVID-19 survivors with dysglycaemia in acute COVID-19 infection** |
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| CH So1, YL Ho1, HH Kwan2, J Fok3, KK Yip4, B Sheng2, KH Chan1, KC Teo1, KK Lau1 |
| *1Division of Neurology, Department of Medicine, School of Clinical Medicine, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong**2Department of Medicine & Geriatrics, Princess Margaret Hospital, Hong Kong**3Department of Medicine, Yan Chai Hospital, Hong Kong**4Department of Medicine and Geriatrics, Ruttonjee Hospital, Hong Kong* |
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| **Introduction:** Population-based studies have suggested increased risks of incident diabetes among COVID-19 survivors, but individuals included in these retrospective observational population-based studies were not systematically evaluated for glycaemic status. |
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| **Methods:** COVID-19 survivors who had dysglycaemia (defined by HbA1c 5.7-6.4% or random glucose ≥10.0 mmol/L) in acute COVID-19 were recruited from a major COVID-19 treatment centre from September to October 2020. Non-COVID controls matched for age, sex, BMI and HbA1c were recruited from community. 75-gram oral glucose tolerance test (OGTT) were performed at baseline (six weeks after acute COVID-19) and one year after acute COVID-19, with HbA1c, insulin and C-peptide measurements. |
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| **Results:** Fifty-two COVID-19 survivors were recruited (age: 61.2±8.8 years; 50% men; BMI: 24.6±3.1 kg/m2; HbA1c 5.5±0.3%). Compared with non-COVID controls (n=50), they had higher C-peptide (0.66 nmol/L [IQR: 0.56-0.83] vs 0.52 [0.45-0.66], p<0.001) and trend towards higher HOMA-IR (p=0.065). Forty-three COVID-19 survivors attended one-year reassessment. HbA1c increased from 5.5±0.3% to 5.7±0.2% (p<0.001), with increases in glucose on OGTT at fasting (p=0.089), 30-minute (p=0.126), 1-hour (p=0.014) and 2-hour (p=0.165). At baseline, 19 subjects had normoglycaemia, 23 had prediabetes, and 1 had diabetes. |
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| **Conclusion:** Subjects who had dysglycaemia in acute COVID-19 were characterised by insulin resistance. Over one year, a quarter had progression in glycaemic status, especially those with more severe COVID-19. Importantly, there was no significant deterioration in insulin secretory capacity. |
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