

中文題目：肥胖對新冠肺炎的影響

英文題目：Impacts of obesity on patients with COVID-19 alpha variant

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Background The novel coronavirus disease 2019 (COVID-19) has become a severe health issue, especially to the patients who may develop silent hypoxia after getting SARS-CoV-2 infection. Obesity may affect respiratory mechanics, decrease respiratory muscle function and lung volumes, and increase dyspnea. Studies on the impact of obesity in patients with COVID-19 were limited in Taiwan. Therefore, we investigated the impact of obesity on patients hospitalized with COVID-19 alpha variant.

Methods The current study investigated patients hospitalized with COVID-19 alpha variant between May 2021 and June 2021. Based on definition of obesity by the Ministry of Health and Welfare, body mass index (BMI) ≥ 27 kg/m² was classified as obesity.

Results The 44 patients (27 male and 18 female) were hospitalized with COVID-19 alpha variant. Their mean age was 40.2 ± 17.2 years. Among them, 17 (38.6%) patients were obese. No significant difference of sex and age was present between obese and non-obese patients. The obese patients tended to present with severe COVID-19 and need of oxygen despite of no statistical difference (60% vs 40%, $P = 0.15$ for severe COVID-19 and 66.7% vs 33.3%, $P = 0.068$ for need of oxygen, respectively). In addition, the obese have a substantially higher probability of abnormal ground glass opacification (GGO) in the high resolution computed tomography (HRCT) (51.7% vs 43.8%, $P = 0.029$) and lung involvement ≥ 2 lobes (56.5% vs 43.5%, $P = 0.013$) did the non-obese patients after convalescence .

Conclusion The current study indicated that obese patients with COVID-19 were apt to have abnormal GGO in the HRCT and multi-lobar involvement than did the non-obese patients.

Keywords: body mass index, obesity, COVID-19