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| **Health outcomes in hospitalised versus non-hospitalised patients following COVID-19 infection** |
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| **Introduction/Aim:** The long term impact of COVID-19 on Australian health status remains largely unknown. Our study aimed to evaluate respiratory and functional outcomes in ambulatory patients following COVID-19 infection, identifying risk factors for persisting symptoms and long COVID syndrome. **Methods:** All patients attending two Australian tertiary centre outpatient post-COVID respiratory clinics were comprehensively assessed. Baseline demographics, clinical data and pulmonary function tests were retrospectively collected and compared between hospitalised and non-hospitalised patients. Univariable and multivariable logistic regression were performed to identify predictors of respiratory symptoms and long COVID. **Results:** 336 patients [45.8% female, 56.8±16.7yrs, n=202 (60.1%) hospitalised, n=208 (64.6%) fully vaccinated at time of infection], with median follow-up 110.5 [interquartile range (IQR) 70.0-168.0] days were included. Comorbidities included diabetes (19.5%), hypertension (39.5%), psychiatric diagnosis (22.5%), and chronic lung disease (24.4%). At initial visit, mean FEV1%, FVC%, DLCO% were significantly lower in hospitalised versus non-hospitalised subjects: 87.2±19.9, 85.2±19.9, 80.0±20.7 respectively; versus 96.9±18.0, 98.3±14.7, 102.7±17.1; p<0.001 for each. Compared to non-hospitalised patients, a greater proportion of hospitalised patients had persisting radiological abnormalities (54.5% versus 12.7%, p<0.001), but fewer had ongoing respiratory symptoms (63.9% versus 89.6%, p<0.001), or functional disability (50.5% versus 69.4%, p<0.001); and fewer fulfilled WHO criteria for long COVID syndrome (22.8% versus 50.0%, p<0.001). Univariate predictors of long COVID included female gender [odds ratio (OR) 1.64, 95% confidence interval (CI) 1.04-2.59, p<0.001], younger age (OR 0.98, 95% CI 0.97-0.99, p=0.03), full vaccination (OR 2.41, 95% CI 1.43-4.07, p<0.001), non-hospitalisation (OR 0.29, 95% CI 0.18-5.43, p=0.001), and psychiatric diagnoses (OR 3.19, 95% CI 1.88-5.43, p<0.001). On multivariable analysis, only psychiatric diagnoses, and non-hospitalisation remained independently predictive of long COVID. **Conclusion:** Distinct differences in disease phenotypes and baseline characteristics were identified in hospitalised versus non-hospitalised patients recovering from COVID-19. Pre-existing psychiatric diagnosis and not being hospitalised during acute illness were independently predictive of long COVID syndrome. **Key Words:** COVID-19, Lung function**Grant Support:** Nil |