Multiple drugs

Gastrointestinal disorders and thrombocytopenia following off-label use: 2 case reports

In a case series, a 75-year-old woman developed GI disorders during off-label treatment with lopinavir/ritonavir for COVID-19 pneumonia, and an 82-year-old man developed thrombocytopenia during off-label treatment with hydroxychloroquine for COVID-19 pneumonia and heparin [dosages not stated; not all indications, routes, time to reaction onsets and outcomes stated].

Patient-A: A 75-year-old woman developed a persistent dry cough on 08 March 2020. On 09 March 2020, she reached in Singapore with her family. On 10 March 2020, she visited hospital due to fever. Her medical history was significant for hypertension, for which she was receiving nifedipine and irbesartan. She was admitted and placed on hydration and unspecified medications for a symptomatic relief. On investigations, a COVID-19 pneumonia was confirmed, and she started receiving off-label treatment with oral lopinavir/ritonavir on 13 March 2020. Subsequently, her fever subsided but recurred on 15 March 2020. Her respiratory symptoms worsened further, and therefore, she received oxygen intermittently. After initial defervescence, her fever reoccurred. Subsequently, she developed intolerable GI disorders secondary to lopinavir/ritonavir. Hence, her lopinavir/ritonavir therapy was replaced with off-label hydroxychloroquine and azithromycin on 20 March 2020, after which she became afebrile. Thereafter, she recovered well but remained hospitalised as her nasopharyngeal swab was still positive for SARS-CoV-2.

Patient-B: An 82-year-old man, who developed a fever on 08 March 2020, had travelled from Indonesia and arrived with his family in Singapore on 09 March 2020. He visited a hospital on 10 March 2020 with fever. His medical history was significant for hypertension treated with bisoprolol, nifedipine and valsartan, diabetes mellitus treated with linagliptin, dyslipidaemia treated with rosuvastatin and gout treated with allopurinol. He also had coronary artery disease and stage 3 chronic kidney disease. He had undergone ablation in July 2019 for atrial flutter. He had stopped smoking for more than 30 years. Thereafter, he was admitted and received hydration and unspecified medications for a symptomatic relief. At that time, he was found to have cardiomegaly and had weakly reactive dengue IgG. Further investigations confirmed COVID-19 pneumonia, and he receiving off-label treatment with lopinavir/ritonavir on 12 March 2020 for COVID-19 pneumonia. He also received oxygen therapy and has been monitored clinically. He was intubated due to worsening of his respiratory condition and was placed on mechanical ventilation. Thereafter, he received norepinephrine [noradrenaline] to maintain BP and hydrocortisone for septic shock. His lopinavir/ritonavir therapy was replaced with off-label hydroxychloroquine and azithromycin. Despite the medication change, his fever persisted. As his condition worsened further, he started receiving off-label IV tocilizumab on 20 March 2020 along with heparin. He received a tocilizumab at a total dose of 560mg over two days. Thereafter, his condition improved gradually. He also developed acute on chronic renal failure with oliguria [aetiologies not stated] and received renal replacement therapy. After improvement in his haemodynamic condition, he was switched to dialysis. Subsequently, he developed progressive thrombocytopenia on 29 March 2020 secondary to heparin and hydroxychloroquine. Hence, his heparin and hydroxychloroquine treatment was stopped on 01 April 2020.

Wong SY, et al. An elderly couple with COVID-19 pneumonia treated in Singapore : Contrasting clinicalcourse and management. Singapore Medical Journal 61: 392-394, No. 7, Jul 2020. Available from: URL: http://doi.org/10.11622/SMEDJ.2020064 803514200