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Losartan

Hypotension and acute kidney injury: 7 case reports

A single-center, pilot feasibility study of hospitalised SARS-CoV-2 positive patients (prospective and retrospective cohort) was conducted between 7 March 2020 and 29 May 2020 at Stony Brook University Hospital, USA, 7 patients [ages and sexes not stated] were described, who developed hypotension or acute kidney injury (AKI) during treatment with losartan for hypertension [not all dosages, durations of treatments to reactions onsets and outcomes stated; routes not stated].

The patients, who had hypertension and tested positive for SARS-CoV-2 during hospitalisation, were enrolled in prospective cohort (n=16) and started receiving losartan 25mg daily, and the patients with a history of losartan use before hospitalisation were enrolled in a retrospective cohort (n=14). In the prospective cohort, 3 patients developed hypotension, which required discontinuation of losartan treatment. Out of 3 patients, one patient with BP of 79/51mm Hg, HR \approx 160 beats/min and atrial fibrillation 8 days post-losartan initiation and treated with an IV bolus of fluids and initiation of vasopressor support, the second patient with BP of 86/49mm Hg 3 days post-losartan initiation and treated with a bolus of fluids to maintain BP \geq 100mm Hg, subsequently resumed losartan treatment on discharge, and the third patient with BP of 103/61mm Hg 2 days post-losartan initiation in the setting of urinary tract infection. In the retrospective cohort, 2 patients developed hypotension, which led to discontinuation of losartan treatment. Of whom, one patient with BP of 91/59mm Hg after intubation and 6 days post-losartan initiation, and a second patient with BP of 100/61mm Hg after intubation and 1 day post-losartan initiation, subsequently resumed on losartan at discharge. The remaining 2 patients developed AKI, of whom one patient discontinued losartan treatment, and the second patient continued on losartan treatment and subsequently AKI resolved.

Bolotova O, et al. Safety, tolerability, and outcomes of losartan use in patients hospitalized with SARS-CoV-2 infection: A feasibility study. PLOS One 15: 1-17, No. 12, Dec 2020. Available from: URL: http://doi.org/10.1371/journal.pone.0244708