

LETTERS

Good things come in threes (and sometimes fours): Update on renin–angiotensin– aldosterone system inhibitors and COVID-19

Since the publication of our article in *CMAJ*,¹ there have been substantial developments in the literature regarding the role of renin–angiotensin–aldosterone system (RAAS) inhibitors in patients with coronavirus disease 2019 (COVID-19). We wish to summarize them here to support our recommendations on prescribing practices for these drugs.

Three large observational studies of more than 20 000 patients with COVID-19 found no association between the use of RAAS inhibitors and increased risk of infection, development of severe disease or death.^{2–4} The 3 studies used different methodological approaches, and all came to similar conclusions.

A different cohort study of 18 472 patients who were tested for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) also found no association between RAAS inhibitor use and testing positive for COVID-19. However, a secondary analysis of 1735 patients in the study with confirmed COVID-19 showed an increased risk of severe disease requiring admission to the intensive care unit in patients using RAAS inhibitors.⁵

All observational studies are at risk of unmeasured confounding. However, according to the results across these studies, RAAS inhibitors are unlikely to cause harm in patients with COVID-19.

In our original article, we reinforced recommendations from multiple professional societies that “the totality of current clinical and experimental evidence for RAAS inhibitors to facilitate infection by SARS-CoV-2 or increase the risk of harm in patients with COVID-19 is insufficient to suggest altering current use.”¹ We continue to support this view. Patients prescribed RAAS inhibitors should remain on them during the COVID-19 pandemic, pending release of high-quality and replicable data to the contrary.

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