

ARTERIAL HYPERTENSION AND COVID-19 INFECTION NEW INSIGHTS

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Introduction. The SARS-Covid 2 infection was first reported in Wuhan, Hubei Province, China on 31 December 2019. Symptomatic SARS-CoV-2 infection was most frequent in the elderly and led to a more severe illness. At the same time, a large fraction of this patient population also suffered from arterial hypertension (AHT). Hence, AHT became a hot topic in the SARS-CoV-2 pandemic studies. **Purpose of the study.** This study aims to shine light on the current insights in this relationship spectrum. **Materials and Methods.** A literature analysis of the latest scientific sources has been carried out using the PubMed search engines, „HINARI” and Google Academic with the help of respective keywords. Additionally, a pathophysiological breakdown and newer advancements in this domain have been referred for the benefit of the study **Results.** AHT was the most prevalent cardiovascular comorbidity in patients with SARS-CoV-2 infection and a major risk factor for increased severity, mortality, and hospitalization. Influential factors included cardiovascular

morbidity, co-morbidities, presenting symptoms, age of the patient etc. The role of AHT is mediated through its effect on the regulation of RAAS, inflammation, immunity and the gastrointestinal tract which partly explains the worse outcomes in covid patients. In contrast to the effect of AHT on SARS-CoV-2 patients, new-onset hypertension was also reported in a few post covid patients. RAAS inhibitors did not fuel clinical adversities and was associated with a lower risk of hospitalization, intubation and death. Newer therapies emerging from the common background include hACE2 and sACE2. **Conclusions.** AHT is an independent risk factor and the most frequently encountered co-morbidity in SARS-CoV-2 patients. New-onset AHT in post-covid patients points to a bidirectional relationship. Current data failed to discredit RAAS inhibitors. Newer therapies from common pathological background may help eliminate a vicious cycle from SARS-CoV-2 infection in AHT patients. **Keywords:** Arterial Hypertension, SARS-CoV-2, RAAS inhibitors.