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Angiotensin converting enzyme inhibitors (ACEI) up to twice the full-recommended dose. Our objective was to describe the results of this protocol in terms of feasibility, efficiency and safety.

Results Of the 74 patients, 66% were men and 15% were of Afro-Caribbean origin. The patients treated averaged 47.1 years of age with an entry blood pressure of 219 (± 29)/125 (± 22) mmHg, an average organ damage of 3.2 ± 0.9 (including brain, eye, heart, hemolysis, and kidneys) and 11% of MOD-HTA. The protocol was completed on all 74 patients. Saline infusion was used in 34% of patients. No serious adverse event such as acute renal failure, hyperkalaemia or hypotension requiring the transfer to an intensive care unit occurred. Substantial reduction of blood pressure was observed in 97% of patients, and one-month average blood pressure was $\leq 140/90$ mmHg in 84% of patients. This remains true in the subgroups of patients with renal failure or renal artery stenosis.

Conclusion Management of uncomplicated MHT by titration of ACE inhibitors makes it possible to achieve effective blood pressure control with a very good tolerance profile. The comparatively low cost of this protocol, its wide availability in developing countries and its focus on MHT pathophysiology cornerstone seem to make it a robust alternative to the IV approach.

Disclosure of interest The authors declare that they have no competing interest.

<https://doi.org/10.1016/j.acvdsp.2020.10.141>

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Hypertension prevalence, awareness, treatment and control in 2019 in the adult population of Mayotte



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Background Hypertension (HTN) is the most frequent chronic pathology in France and a major risk factor for stroke and cardiovascular diseases. Few recent data are available for the French overseas departments. In 2008, the HTN prevalence was estimated at 44% for the Mahorese population.

Purpose To update the data of the HTN prevalence, awareness, treatment and control. To describe the socio-demographic and medical characteristics of the hypertensive Mahorese population.

Methods This cross-sectional study was carried out in a sample of the population aged 30 to 69 and living in Mayotte. Data were collected through a face-to-face interview and a clinical exam. Hypertension was defined by patient-reported hypertension or the measurement of a blood pressure $\geq 140/90$ on clinical exam. Data were weighted to adjust to the Mahorese population structure. The prevalence of HTN and the characteristics of the population were described.

Results In 2019, 1,856 people aged 30–69 participated in this survey. More than two third of the interviewed adults were overweight (56.7% of the men against 82.9% of the women), 12.6% consumed alcohol and 12.5% were active smoker. The HTN prevalence in the age range 30–69 was estimated at 48.6% (47.1% in men and 50.0% in women). HTN significantly increased with age with a prevalence of 83.5% for the range 60–69 years old. In hypertensive people, 48.3% were aware of their condition, higher in women (55.6%) than in men (39.7%) and 25.6% were taking an antihypertensive treatment. Among treated hypertensive people, 30.2% were controlled for this disease.

Conclusion Nearly one in two people are hypertensive and only a fourth of the hypertensive are medically treated. The socio-demographic, medical and exposure to certain cardiovascular risk factors may explain some of these Results They underline the importance of carrying out specific studies in this French territory and the need to develop preventive and care actions.

Disclosure of interest The authors declare that they have no competing interest.

<https://doi.org/10.1016/j.acvdsp.2020.10.142>

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Outcomes of hospitalized patients with SARS-CoV-2 infection previously treated with renin-angiotensin system inhibitors



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Background Renin angiotensin system inhibitors (RASi) are largely prescribed in hypertensive patients. As severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) penetrates respiratory epithelium through angiotensin converting enzyme 2 (ACE2) binding, the association between RASi and poorer outcomes has been questioned.

Purpose This study aimed to provide insight on the impact of RASi on SARS-CoV-2 outcomes in a population of patients hospitalized for COVID-19.

Methods This is a retrospective analysis of consecutively hospitalized adult patients with SARS-CoV-2 infection (positive rPCR) admitted to the University Hospital of Strasbourg from the 25th Feb, 2020 to the 1st Apr, 2020. Patients hospitalized for less than 24h were excluded and the observation period ended at hospital discharge.

Results During the study period, 943 COVID-19 patients were hospitalized in our institution, of whom 772 were included in this analysis. Among them, 431 patients had previously known hypertension. The median age was 68 (56–79). The cohort was divided into two subgroups based on RASi treatment on admission: “RASi” ($n = 282$) and “RASi-free” ($n = 490$). Both groups had similar clinical presentations and equivalent recourse to endotracheal intubation, high flow nasal oxygen (HFNO) or non-invasive ventilation (NIV). Overall, 220 patients were placed under mechanical ventilation of whom 30% died. Severe pneumonia (defined as either leading to death, and/or requiring intubation, HFNO, NIV and/or requiring an oxygen rate flow ≥ 5 l/min) and death occurred more frequently in RASi treated patients (63% vs. 53% and respectively 27.3% versus 18.2%). In a multivariate logistic-regression model, neither severe pneumonia nor death were associated with RASi treatment.

Conclusion Our study showed no correlation between RASi treatment and death or severe COVID-19 pneumonia.

Disclosure of interest The authors declare that they have no competing interest.

<https://doi.org/10.1016/j.acvdsp.2020.10.143>