

Discontinuation of vascular therapeutics during the COVID-19 pandemic first wave in France

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Letter to the editor

Discontinuation of vascular therapeutics during the COVID-19 pandemic first wave in France.

Short title: Discontinuation of vascular treatments during first wave of COVID-19 in France

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BACKGROUND: Coronavirus disease 2019 (COVID-19) pandemic led to measures throughout Europe ranging from social distancing to widespread containment [1], which

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could lead to discontinuation of treatment. In addition, several studies suggest an over-risk of venous thromboembolic disease associated with COVID-19, which has led the French [2] and internationals [3] learned societies to propose thomboprophylaxis in the most severe forms. Finally, controversies have emerged on the role of Angiotensin-converting enzyme (ACE) inhibitors and angiotensin-2 receptor antagonists (ARB2) [4] which are daily treatments for many patients with peripheral artery disease who are themselves at risk of severe COVID-19 infection [5].
These different elements may have led to changes of vascular therapeutics during the COVID-19 epidemic in France; at the request of the French national agency of drugs this work aims to identify them.

METHODS: A 6 points questionnaire was proposed to patients during an out-patient consultation by vascular physicians who were members of the French Society of Vascular Medicine (SFMV). Physicians had previously received an e-mail request to participate by completing an online questionnaire (LimeSurvey® Software, Hamburg). Patients were informed of the objectives of the research and the anonymity of data collected. The estimated time for answering questions was two minutes. Anonymous data were centralized in a database hosted by the SFMV. Participation was unpaid. Quantitative results are expressed in mean ± standard deviation and qualitative in percentage (%).

RESULTS: In May 2020, 1936 e-mails were sent to SFMV members. This resulted in the collection of completed questionnaires for 297 patients whose characteristics are show in table 1. This survey identified 5% of treatment withdrawals. The treatments usually prescribed for chronic diseases, such as anti-platelet or statins for peripheral artery disease, were largely maintained (respectively 0.3% and 1.0% of discontinuation).

DISCUSSION: Other studies have investigated the impact of the pandemic on the management of patients, including a decrease in emergency hospitalizations [6] and immunomodulatory treatment interruptions [7], but to our knowledge this is the first report on vascular therapeutics follow-up during the COVID-19 pandemic. We found that 5% of patients stopped treatments in a sample of 297 patients. The circumstances of these discontinuations are unknown, but it can be assumed that some of them, such as those for VTE anticoagulants, may be secondary to the non-renewal of a prescription or the planned end of a short course of treatment. It should be noted that there has been no interruption of supply or shortage of these drugs in French pharmacies [8]. The initial controversy over ACE or ARB2 does not appear to have led to discontinuation of treatment and should not be further addressed in light of the results of the BRACE CORONA study, which found no significant difference in 30-day survival between discontinuation or continuation of ACE/ARB2 in patients hospitalized for COVID-19 [9]. Finally, it should be noted that the activity of vascular physicians was probably strongly impacted during this pandemic as suggested by a survey during the same period, using an identical questionnaire methodology filled out by volunteer vascular physicians, potentially subject to the same selection bias [10].
Regarding the limitations, this study was not able to evaluate the consequences of these therapeutic changes and the representativeness of patients with chronic vascular disease is not assured. Indeed, patient history was not systematically collected, the reason for consultation was unknown as well as the participation rate.

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CONCLUSION: This survey did not identify major modification of vascular therapeutics during the COVID-19 pandemic first wave in patients followed by vascular physicians who were members of the SFMV.

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DISCLOSURE

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Table 1. Characteristics of patients

Variables	Values (n = 297)
Age (year +/- sd)	65 +/- 14
Female Sex (%)	56%
Immobilization (lower limb trauma or bed rest)	4%
Interruption of usual treatment (%)	5.0%
Anticoagulant (%) for VTE	2.0%
Anticoagulant (%) for AF	0.0%
Antiplatelet agent (%)	0.6%
Antihypertensive drugs (%)	0.6%
Statin (%)	0.6%
Anti-inflammatory (%)	0.6%
Anti-diabetic (%)	0.3%
Other (%)	0.3%

% : percentage, sd : standard deviation, VTE : Venous ThromboEmbolic disease, AF : Atrial Fibrillation

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