LETTERS TO THE EDITOR

Early experience in Paris with the impact of the COVID-19 pandemic on vascular surgery

April 6, 2020, day 20 since the general lockdown in France. The Paris area is the heart of the COVID-19 pandemic in our country. Five years after the Paris terrorist attack in 2015, the Parisian health care system is again facing an unprecedented challenge. But this time we are urgently in need of intensive care unit (ICU) beds, ventilators, and personal protective equipment rather than operating rooms (ORs). Our ICU capacities have been doubled by transforming any available space with ventilators into ICUs: recovery rooms, outpatient surgical units, even ORs. To spare most of the in-hospital resources, all nonemergent surgical procedures have been canceled. ORs are used to manage emergencies only. According to the French Society for Vascular Surgery's recommendations based on the 3Ss principle (save Staff, Space, and Stuff), our surgical activity is now limited to the following emergencies: acute aortic syndromes, critical and acute limb ischemia, symptomatic carotid stenosis, mesenteric ischemia, and vascular access for hemodialysis, with endovascular favored over open repair whenever possible to shorten hospital and ICU stay.

By the end of March, ICU capacities quickly became saturated in most of our centers, which made acute vascular patient referrals very difficult. To coordinate and optimize acute patient referrals, we created secured social network groups including all vascular surgery consultants from both public and private hospitals in the Paris area. These groups allowed us to share clinical experience and to set up clinical studies. ICUs have been divided into COVID-19-positive and COVID-19-negative units. Therefore, systematic preoperative screening for COVID-19 should be recommended. Suspected cases might be considered positive. No COVID-19-negative center could have been preserved because of the magnitude of the pandemic.

Most important, we have observed a rising number of acute arterial events in COVID-19 patients with no prior vascular history, as related by Zhang et al.[1] These vascular complications include acute thrombosis of the abdominal aorta and carotid and peripheral arteries and can be the revealing symptom of COVID-19. The assumption of a COVID-19-related hypercoagulability is supported by high reported rates of deep venous and pulmonary thromboembolism and the identification of a disseminated intravascular coagulation in COVID-19 ICU patients.[2] Our group is conducting a clinical study of vascular events in COVID-19 patients.

Regarding staff management, our daily rotations have been completely modified, with one team dedicated to vascular emergencies in each center. The remaining team members participate in COVID-19-related activities in acute COVID-19 units and ensure telemedicine outpatient follow-up. In the ICU, we flip ventilated patients into the prone position and perform central line placement. For vascular outpatient clinics, phone interviews have replaced classic clinics.

Surprisingly, we have observed a significant decrease in overall vascular referrals, as has been observed for stroke and myocardial infarction. This might be a collateral damage of the pandemic that dissuades our fragile patients from consulting emergency departments. We will probably face a postpandemic wave of patients with severe vascular conditions.

To conclude, we would like to warn the vascular community about acute arterial thromboembolic events that might be related to COVID-19 disease.

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Doing the right thing for the right reason when treating ruptured abdominal aortic aneurysms in the COVID-19 era

The recent COVID-19 pandemic has increased the workload of health services worldwide, especially in regard to availability of intensive care unit (ICU) beds. The need of spare ICU beds in favor of COVID-19 patients increases the danger of diminished treatment options for patients suffering from other diseases, especially where resources are limited.

Patients with ruptured abdominal aortic aneurysms (rAAAs) are among those who may need the ICU postoperatively. Open repair increases both the intraoperative complexity of treatment and the need for postoperative intensive care. On the other hand, endovascular aneurysm repair (EVAR) can be performed under local anesthesia, and a successful outcome is usually accompanied by short recovery and quick turnover.

We recently admitted a 78-year-old man with a rAAA. He presented with lumbar pain and hypotension. Because of the COVID-19 pandemic, there was no bed available in the ICU. The patient underwent an emergency endovascular repair under local anesthesia using