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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 an Ankura endograft (Lifetech, Shenzhen, China). He received only 3 packs of red blood cells intraoperatively, and after the procedure, he was transferred immediately to the vascular surgery ward. No ICU was needed. He had an uneventful recovery, with full mobilization and oral feeding from the first postoperative day and discharge on the second postoperative day.

Although the type of treatment of rAAA is still debatable,<sup>1</sup> EVAR is considered the first treatment option in an increasing number of vascular departments worldwide because of the reduced perioperative risk and shorter postoperative in-hospital length of stay.<sup>2</sup> Definitely, the low number suitable for endovascular repair<sup>3</sup> should be taken into consideration. The 2018 guidelines for the treatment of AAA recommend EVAR over open repair in anatomically suitable patients with rAAA.<sup>2</sup> Performing the procedure under local anesthesia is an additional advantage. In a recent analysis of the Vascular Quality Initiative database, patients with rAAA who were treated with EVAR under local anesthesia compared with EVAR under general anesthesia had

decreased intraoperative time, decreased number of intraoperative blood transfusions, decreased ICU length of stay, and fewer postoperative pulmonary complications.<sup>4</sup>

Today, when everyone in the health care system struggles with challenges posed by the coronavirus, every choice should be made with the concept in mind of “doing the right thing for the right reason.” Using EVAR, if it is anatomically possible, under local anesthesia rather than open repair or EVAR under general anesthesia seems to be the best solution. This way, we can achieve both goals at the same time, that is, treating patients in danger and saving valuable health care resources.

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