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Letters

TO THE EDITOR

Venoarterial Extracorporeal Membrane Oxygenation in Cardiogenic Shock

Keebler et al. (1) set out an interesting and useful study pertaining to some of the key management issues of veno-arterial extracorporeal membrane oxygenation (ECMO) for refractory cardiogenic shock. As the authors rightly note, avoiding left ventricular distention using a venting strategy is crucial in providing the optimal environment for left ventricular recovery. In addition to the strategies mentioned in the paper, I would like to point to a minimally invasive surgical procedure that has been used safely and effectively at our institution (2).

This involves the insertion of a 31-F dual-lumen cannula, via a transapical approach, whereby the inflow port sits directly in the left ventricle, and the outflow port lies 2 to 3 cm above the aortic valve. The insertion is a single-stick through the left mini-thoracotomy and is performed off-pump. When the cannula is used in conjunction with an internal jugular venous drainage cannula, this functions as an ECMO circuit. Blood from both the venous drainage cannula and left ventricle enter the pump and oxygenator. Oxygenated blood is then ejected into the outflow port in an antegrade fashion. This strategy has 3 main benefits. First, it allows for patient ambulation during ECMO, in turn reducing the risk of critical-illness myopathy. Second, compared to other left ventricular venting strategies, including transaortic microaxial flow pumps, this approach provides total antegrade flow support and therefore obviates the potential for the Harlequin syndrome to develop. Third, by removing the venous drainage cannula, the system functions as a left ventricular assist device with oxygenator. This allows the potential to provide an assessment of right ventricular function during the recovery phase. In turn, should the patient require a durable ventricular assist device, it is possible to more accurately evaluate whether a left ventricular or biventricular assist device is required. This becomes particularly important considering the more granular approach taken with the proposed new heart allocation system (3).

It is clear that left ventricular venting is crucial in the setting of left ventricular distension while on veno-arterial ECMO. Whereas there are several options for venting, we believe that a surgical approach provides a viable alternative and has several advantages that the current percutaneous strategies do not offer.

*Prashant Rao, MD
Richard Smith, CCE
Zain Khalpey, MD

*Sarver Heart Center
University of Arizona
1501 North Campbell Avenue
PO Box 245071
Tucson, Arizona 85724-5071
E-mail: prashant.rao@doctors.org.uk

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Please note: The authors have reported that they have no relationships relevant to the contents of this paper to disclose.

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Comparison of Prognostic Scores in Chronic Heart Failure

We read with interest the paper by Canepa et al. (1). The authors should be congratulated for their effort in organizing a multicenter European registry in which thousands of patients were included. However, some topics warrant further clarification. The authors state that the most recent Meta-analysis Global Group in Chronic Heart Failure score is more accurate in