The good, the bad and the ugly—or how to treat complications of complications

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Disclosures: Author has nothing to disclose with regard to commercial support.

Received for publication March 11, 2018; accepted for publication March 16, 2018; available ahead of print April 12, 2018.

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J Thorac Cardiovasc Surg 2018;156:e107

0022-5223/\$36.00

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<https://doi.org/10.1016/j.jtcvs.2018.03.063>

Extracorporeal life support (ECLS), otherwise known as venoarterial extracorporeal membrane oxygenation, is a lifesaver in various clinical scenarios, including as a bridge to transplant. This is the good thing.¹

Many patients in need of ECLS for any reason have long medical histories, and very often they have already undergone various cardiac or vascular procedures. A patient's history may present such challenges as obstacles in obtaining vascular access or the need to modify the ECLS circuit in response to potential game changers, such as previous left-sided mechanical valve replacement. This is the bad thing.

Irrespective of how meticulously you anticipate complications and how diligently you design your treatment plan, unexpected events always present an unpredictable gray zone when treating critically ill patients. This is the ugly thing.²

The report by Sandoval and colleagues¹ in this issue of the *Journal* nicely shows how versatility, situational adaptiveness, and a disruptive surgical approach can keep you ahead even in the face of these challenges. Fortune frequently favors the bold, and this approach was followed by an early availability of a suitable organ, a desired situation that is owed to the excellent Spanish donor system.

Establishment of ECLS always mandates the prevention of further complications from those already existing. This is a particular challenge in the case of patients in need of ECLS after previous left-sided mechanical valve replacement. Creating a scenario of continuing flow, such as by

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Central Message

When the need to treat complications arising from other complications arises, versatility, situational adaptiveness, and a disruptive surgical approach can still keep you ahead.

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implanting an Impella (Abiomed, Inc, Danvers, Mass) pump,³ may serve as an additional means to prevent the kind of complication reported by Sandoval and colleagues.¹ Still, all kinds of complications can arise from scenarios intended to prevent other complications. These are trade-offs in which versatility, situational adaptiveness, and—as in the report of Sandoval and colleagues¹—the courage to disruptive surgical solutions remain the most important factors in success.

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