Correspondence Letter by Akin, Kompanje and Caliskan Regarding Article, "Dying With a Left Ventricular Assist Device..."
To the Editor:

We read with interest the publication by Dunlay et al entitled ‘Dying with a left ventricular assist device as destination therapy.’ (1) In this article, the authors state that ‘In contrast to the general heart failure population, most patients with left ventricular assist device as a destination therapy (LVAD-DT) die in the hospital and few use hospice.’ Despite palliative care consultation in 46.3% of the cases there were still 91.7% of LVAD-DT patients admitted for end-of-life care to an ICU where subsequently 87.7% of them died. However, some considerations should be made.

First, the high rate of ICU admissions of LVAD-DT for end-of-life care reflects the health care system and/or patients and family’s choices. The latter will be influenced by pre-operatively given training, information about what to do in case of untreatable complications, but also by cultural, social, personal and religious reasons. (2,3) Recently it has been described that a potential of more than 20% of critical care patients in UK want to die at home. (4)

Second, problem of end-of-life decisions in LVAD-DT doesn’t need to be differentiated from all known aspects of it in patients with chronic diseases like cancer of debilitating neurological conditions. Bekelman et al (5) compared the site of death for patients dying from cancer in 7 developed countries. Interestingly lowest proportion of decedents was seen in the USA and in the Netherlands in acute care hospitals. However, ICU admission preceding death was more than twice as common in the United States as in other countries. Dunlay et al. didn’t mentioned about the ability for transferring home in a physician-staffed mobile intensive care unit (MICU) as we know from our Dutch experience. These patients prefer to die in their own bed, surrounded by their loved-ones after withdrawal of mechanical ventilation and/or vasoactive medication by a palliative team. (3) In our perception, a maximum of 10% in-hospital mortality would be needed, instead of 78% as described as Dunlay et al. describe, given the clinical courses: early (10%), persistent (20%), terminal (30%) and acute (i.e. sudden? 40%). However, a clear flowchart for end-of-life care management of LVAD-DT patients, improving the collaboration between general physicians, mechanical circulatory support teams and palliative care teams has yet to be developed.

Finally, end-of-life care for LVAD-DT patients should be comparable to chronic heart failure in contrast to what the author suggests. The use of cooperative care for end-of-life at home, such as with ambulance personnel and district nurses, are indispensable. However, switching off LVAD support in terminal patients should be similar to ending medical support in other chronic conditions. We would like to consider a worldwide consensus about end-of-life care at home for every LVAD patient, when there is clear protocol and collaboration between primary care professionals, experienced palliative care specialists and mechanical circulatory support team. Additional research in of end-of-life questions are still needed.
Disclosures
None

Sakir Akin, MD
Erwin J.O. Kompanje, PhD
Kadir Caliskan, MD PhD
Departments of Cardiology and Intensive Care Unit
Erasmus Medical Center, University hospital of Rotterdam
The Netherlands

References

Competing Interests: None declared.