

## Permanent Implantable Cardiac Support Systems

by Prof. Dr. med. Jan F. Gummert, Prof. Dr. med. Dr. h. c. Axel Haverich, Prof. Dr. med. Jan D. Schmitto, PD Dr. med. Evgenij Potapov, Prof. Dr. med. René Schramm, and Prof. Dr. med. Volkmar Falk in issue 50/2019

### The Importance of Palliative Counseling

Gummert et al. in their instructive review article (1) are right to emphasize the need for a multidisciplinary approach in evaluating treatment with ventricular assist devices (VAD). We wish to point out the importance of targeted palliative counseling for patients and their relatives (2, 3).

Even though the efficiency of cardiac support systems and associated complication rates have notably improved in recent years, a substantial proportion of patients die within the first year. Many others will develop substantial physical impairments and require round-the-clock care by their relatives. On this background, comprehensive information about the option of palliative care in the sense of best supportive care compared with the opportunities provided and burdens imposed by mechanical cardiac assist systems is of particular importance (for example: [www.patientdecisionaid.org/lvad](http://www.patientdecisionaid.org/lvad)). Advance care planning should be an essential component of the preparations, in which patients articulate their preferences in case of further deterioration of their health and can nominate a proxy for power of attorney to act on their behalf (3).

At this point we would also like to remind readers of the situation that arises when patients express a desire to end their VAD therapy because they no longer experience their quality of life as tolerable (for example, also if they develop a secondary incurable disorder). The associated ethical problems and the great burden on all involved, which arise from the usually rapid death of the patient after the VAD is switched off, require particular attention and a well-coordinated approach that should have been discussed in advance (4).

DOI: 10.3238/arztebl.2020.0268a

#### References

1. Gummert JF, Haverich A, Schmitto JD, Potapov E, Schramm R, Falk V: Permanent implantable cardiac support systems. *Dtsch Arztebl Int* 2019; 116: 843–8.
2. Salomon S, Frankel H, Chuang E, Eti S, Selwyn P: Implementing routine palliative care consultation before LVAD implantation: a single center experience. *J Pain Symptom Manage* 2018; 55: 1350–5.
3. Warraich HJ, Maurer MS, Patel CB, Mentz RJ, Swetz KM: Top ten tips palliative care clinicians should know about caring for patients with left ventricular assist devices. *J Palliat Med* 2019; 22: 437–41.
4. Brush S, Budge D, Alharethi R, et al.: End-of-life decision making and implementation in recipients of a destination left ventricular assist device. *J Heart Lung Transplant* 2010; 29: 1337–41.

**Dr. med. Christina Gerlach MSc**

**Prof. Dr. med. Martin Weber**

Interdisziplinäre Abteilung für Palliativmedizin, III. Medizinische Klinik  
Universitätsmedizin der Johannes Gutenberg-Universität Mainz  
[christina.gerlach@unimedizin-mainz.de](mailto:christina.gerlach@unimedizin-mainz.de)

#### Conflict of interest statement

The authors declare that no conflict of interest exists.

### In Reply:

All authors express their thanks for the important addition in Dr. Gerlach's and Prof. Weber's comments. It should be clearly emphasized that multidisciplinary treatment of patients with terminal heart failure with permanent implantable cardiac support systems by far exceeds the scope of surgical and cardiological care. Method-related physical impairments, complications, and therapeutic failures require more intense support from relatives and treating physicians—in the clinical as well as the domestic setting. In the sense of advance care planning, a treatment plan should be developed even before the implantation by the team consisting of the patient, their relatives, and treating physicians. Unrealistic therapeutic goals (cure or heart transplantation) should primarily not be in the offing in this setting. A proxy for power of attorney should be nominated early and should be involved in all phases of the treatment. On the occasion of the first presentation, the option of palliative care in the sense of best supportive care should be raised in the team as a valid, alternative treatment pathway. A decisive patient's advance directive should be written up early.

If patients with mechanical circulatory support enter the phase of heart failure, in which they require palliative care, it should be borne in mind that the process of dying is defined not only by internal degradation processes but can also depend on the function of the support system. In this phase, advanced treatment planning can help cushion the extreme psychosocial stress that arises for all involved when mechanical circulatory support treatment is stopped.

The recently published consensus report of the European Association of Cardio-Thoracic Surgery (EACTS)—which we cited in our article—dedicates an entire “End of Life Care” chapter to these important aspects (2).

DOI: 10.3238/arztebl.2020.0268b

#### References

1. Gummert JF, Haverich A, Schmitto JD, Potapov E, Schramm R, Falk V: Permanent implantable cardiac support systems. *Dtsch Arztebl Int* 2019; 116: 843–8.
2. Potapov EV, Antonides C, Crespo-Leiro MG, et al.: 2019 EACTS expert consensus on long-term mechanical circulatory support. *Eur J Cardiothorac Surg* 2019; 56: 230–70.

**Prof. Dr. med. René Schramm, PhD**

Klinik für Thorax- und Kardiovaskularchirurgie  
Herz- und Diabeteszentrum NRW  
Universitätsklinik der Ruhr-Universität Bochum  
Bad Oeynhausen  
[rschramm@hdz-nrw.de](mailto:rschramm@hdz-nrw.de)

#### Conflict of interest statement

Prof. René Schramm has received speaker honoraria and travel expense reimbursement from Abbott.