CORRESPONDENCE

Current Pacemaker and Defibrillator Therapy

by Prof. Dr. med. Hans-Joachim Trappe, Prof. Dr. med. Jan Gummert
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In the Context of the End of Life

The article by Trappe and Gummert was well worth reading, but in our opinion it would have been useful to focus briefly on the existing recommendations for handling internal cardioverter defibrillators (ICDs) in the context of the end of life.

In chronic underlying terminal diseases, repeated and sustained internal defibrillation may lead to extremely painful events during an otherwise calm dying process that constitute a genuine “shock” for patients and relatives, in the truest sense of the word, which prevents the patient from dying naturally and peacefully (1). Awareness of this problem is currently not as widespread as would be desirable (1, 2).

Leading institutions (among others, the European Heart Rhythm Association/American College of Cardiology; American Geriatrics Society; American Academy of Hospice and Palliative Medicine, American Heart Association und Heart Rhythm Society) in their consensus statements (1, 2) therefore recommend not to implant an ICD without providing extensive information (and documentation) about the problems potentially arising at the end of life.

In addition to many other recommendations, deactivation of the ICD is actively recommended as the minimum standard (1) if:

- a) A so called DNR (do not resuscitate—in the absence of any medical indication) order exists, or
- b) The treatment aims primarily to maintain a patient’s quality of life.

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In Reply:

Prevention of sudden cardiac death by means of implantable defibrillators has been amply documented for more than 25 years (1). Because of the ageing population and an increasing expansion of ICD and/or resynchronization therapy, questions arise about patients’ quality of life and of how to handle ICD treatment at the end of life (2). Repeated ICD shocks are not only painful, but they may be traumatic for dying patients and their relatives, as well as for doctors and nursing staff. At the end of life it may be advisable to deactivate the device, especially as repeatedly triggered shocks in the prefinal stage are not unlikely. Goldstein et al investigated the circumstances of dying in 136 people with ICDs (3). They found that in only 27% of cases the doctors discussed deactivating the device with the patient, and only at a very late stage of their illness (3). It also became obvious that many doctors experienced a feeling of killing the patient by deactivating the ICD and were uncertain about the legal aspects of deactivation.

The fact that in recent statements about this problem a discussion with patients and relatives has been stipulated before ICD implantation—especially regarding the situation at the end of life—is to be welcomed. Equally welcome and worth supporting is the recommendation to deactivate the device in patients in whom resuscitation is not medically indicated or where the primary treatment objective is the patient’s quality of life.

It is therefore imperative to discuss the circumstances of dying for people with an ICD with patients, their relatives, their doctors, and their nursing staff, in order to enable dying without pain and with dignity, and to save relatives from experiencing additional trauma at the end of life.

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Conflict of interest statement

All authors declare that no conflict of interest exists.