Managing CIED Requests from Terminal Patients

David Hayes, MD, Chief Medical Officer

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My XX-year-old patient asked me to turn off his ICD, 'Tachy' therapies only, because he has end-stage cardiomyopathy. You would:

1. Discuss in detail, document and abide by request
2. Request ethics consult
3. Request psych evaluation
4. Explain that ICD unlikely to alter course and best to leave as is

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My XX-year-old ICD patient asked me to turn off his tachy and brady therapies because he has end-stage cardiomyopathy. He is pacemaker dependent. You would:

1. Discuss in detail, document and abide by request
2. Agree to turn off tachy therapies but not pacing therapies
3. Request ethics consult
4. Explain that ICD unlikely to alter course and best to leave as is

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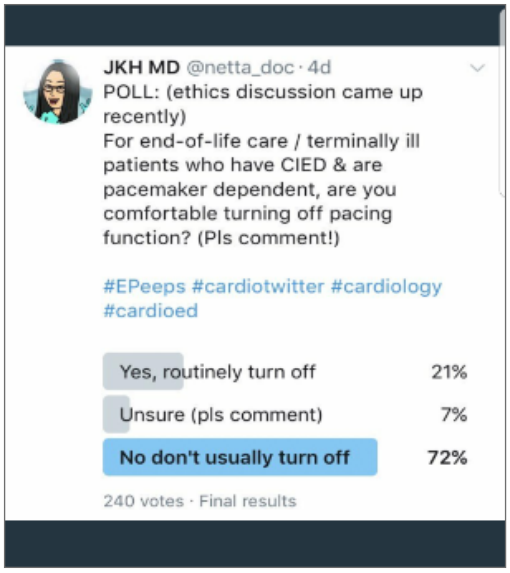

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Ethical Aspects Of Deactivating Implanted Cardiac Devices

Increased prevalence of devices in dying patients

- End-of-life (EOL) discussions with cardiologists are not done routinely
- Patients and families fear devices prolong the dying process
- Patients with ICDs may experience uncomfortable therapies

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Ethical Aspects Of Deactivating Implanted Cardiac Devices

- Is device deactivation ethical? Is it legal?
- Is device deactivation more like withdrawing other life sustaining therapies (LSTs), or more like physician assisted suicide (PAS) and euthanasia?
- Under what conditions (eg, code status) should deactivation be done?
- Who should carry out deactivation?

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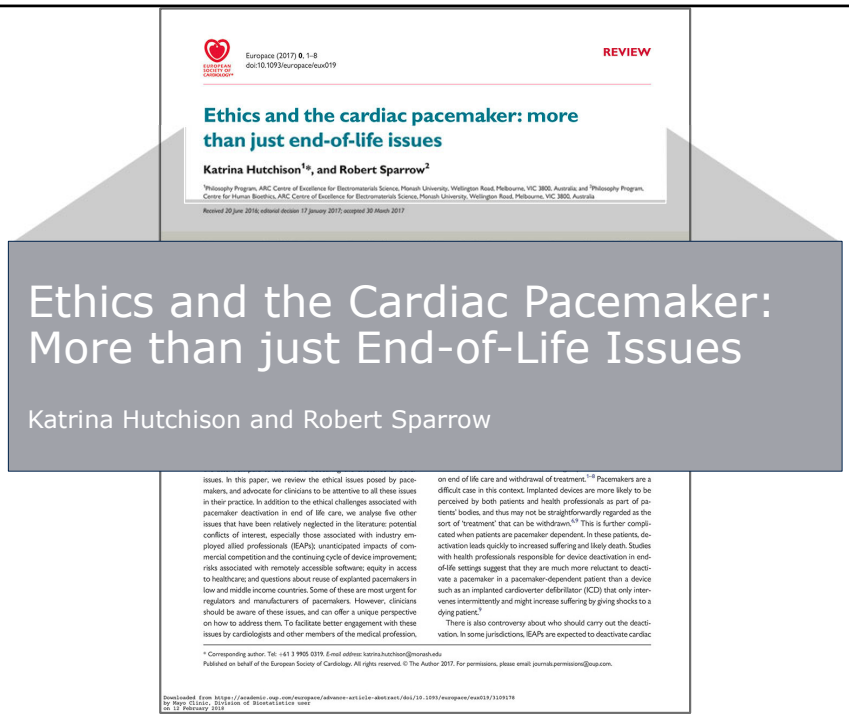

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REVIEW

Ethics and the cardiac pacemaker: more than just end-of-life issues

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issues. In this paper, we review the ethical issues posed by pacemakers, and advocate for clinicians to be attentive to all these issues in their practice. In addition to the ethical challenges associated with pacemaker deactivation in end of life care, we analyse five other issues that have been relatively neglected in the literature: potential conflicts of interest, especially those associated with industry employed allied professionals (IEAPs); unanticipated impacts of commercial competition and the continuing cycle of device improvement; risks associated with remotely accessible software; equity in access to healthcare; and questions about reuse of explanted pacemakers in low and middle income countries. Some of these are most urgent for regulators and manufacturers of pacemakers. However, clinicians should be aware of these issues, and can offer a unique perspective on how to address them. To facilitate better engagement with these issues by cardiologists and other members of the medical profession, on end of life care and withdrawal of treatment.[1–8] Pacemakers are a difficult case in this context. Implanted devices are more likely to be perceived by both patients and health professionals as part of patients' bodies, and thus may not be straightforwardly regarded as the sort of 'treatment' that can be withdrawn.[3,8] This is further complicated when patients are pacemaker dependent. In these patients, deactivation leads quickly to increased suffering and likely death. Studies with health professionals responsible for device deactivation in end-of-life settings suggest that they are much more reluctant to deactivate a pacemaker in a pacemaker-dependent patient than a device such as an implanted cardioverter defibrillator (ICD) that only intervenes intermittently and might increase suffering by giving shocks to a dying patient.[9]

There is also controversy about who should carry out the deactivation. In some jurisdictions, IEAPs are expected to deactivate cardiac

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Withholding and Withdrawing Life-Sustaining Treatments (LST)

- Many types of LSTs: dialysis, ventilation, artificial nutrition, etc.
- In the US, withholding and withdrawing LSTs ethical and legal:
  - Respect for patient autonomy
  - Famous legal cases; not a "right to die," but a right to be left alone (liberty interest)
- There is no ethical or legal distinction between withholding and withdrawing

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Vacco v. Quill: U.S. Supreme Court, 1997

"The distinction comports with fundamental legal principles of causation and intent. First, when a patient refuses life-sustaining medical treatment, he dies from an underlying fatal disease or pathology; but if a patient ingests lethal medication prescribed by a physician, he is killed by that medication...[In Cruzan] our assumption of a right to refuse treatment was grounded not…on the proposition that patients have a…right to hasten death, but on well established, traditional rights to bodily integrity and freedom from unwanted touching."

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Withholding and Withdrawing Life-Sustaining Treatments

- Dying patients [or families] frequently make such requests
- Honoring these requests is not the same as physician-assisted suicide (PAS) or euthanasia
- The clinician is obligated to ensure the patient [surrogate/family] understands the consequences and alternatives to the request

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Withholding and Withdrawing Life-Sustaining Treatments

	Withhold LST	Withdraw LST	Terminal analgesia	Physician-assisted suicide	Euthanasia
Cause of death	Underlying disease	Underlying disease	Underlying disease‡	Intervention prescribed by physician and used by patient	Intervention used by physician
Intent/goal of intervention	Avoid burdensome intervention				Termination of the patient's life
Legal?	Yes†	Yes†	Yes	Some states*	No

‡Terminal analgesia may hasten death ("double effect")

†Legal in all states but some limit the power of surrogates regarding LSTs

*Legal in California, Colorado, District of Columbia, Hawaii, Montana, Maine, New Jersey, New Mexico, Oregon, Vermont, and Washington.

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Caregivers Cannot Be Forced To Violate Their Moral/Religious Convictions

- You cannot compel a clinician/caregiver to perform a medical procedure he or she views as morally unacceptable
- A process must be in place whereby deactivation could be done once all appropriate steps are completed

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Ethical Aspects Of Deactivating Implanted Cardiac Devices

Is deactivation of a pacemaker the same as deactivating an ICD or CRT?

- Perform different functions
- Deactivation may have different outcomes if the patient is pacemaker dependent
- Some argue devices do not prolong the dying process
- Withholding and withdrawing treatments are viewed as the same legally and ethically

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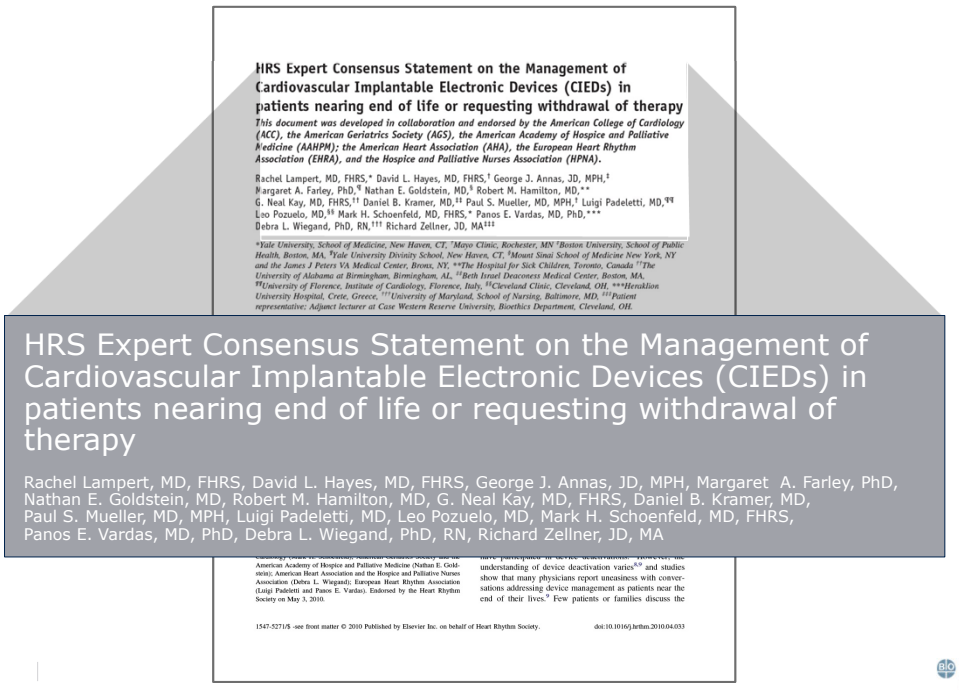

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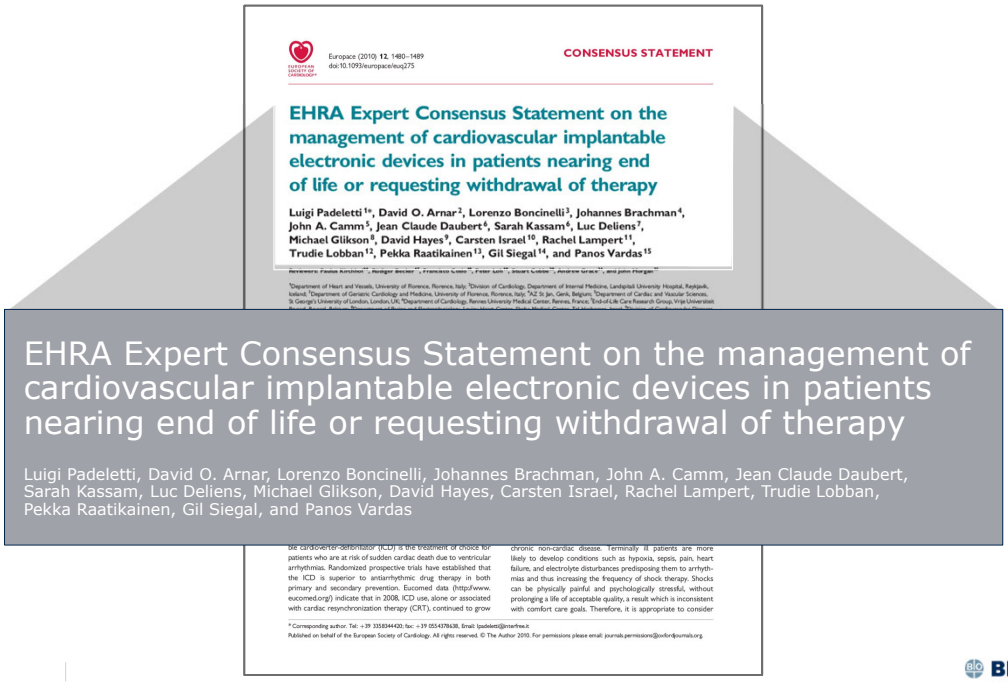

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CONSENSUS STATEMENT

EHRA Expert Consensus Statement on the management of cardiovascular implantable electronic devices in patients nearing end of life or requesting withdrawal of therapy

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PATIENT EDUCATION

Planning ahead: End-of-life decisions for patients with defibrillators

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Written Documentation Required

1. Confirmation that the patient or surrogate has requested device deactivation
2. Capacity of the patient to make the decision, or identification of the appropriate surrogate
3. Confirmation that alternative therapies have been discussed if relevant
4. Confirmation that consequences of deactivation have been discussed
5. The specific device therapies to be deactivated
6. Notification of family, if appropriate

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My XX-year-old patient just asked me to turn off his ICD because…..

- Legally the answer would be the same for all scenarios, i.e. the patient owns the decision
- Practically and clinically, different approaches may be appropriate, e.g. if the patient just lost his spouse, assess psychiatric status and treat if needed
- The "moral compass" of the caregiver involved should be respected but not dictate care
- Many caregivers would perceive the pacemaker dependency issue differently, even if legally there is no distinction

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