

Deactivation of an implantable cardioverter

defibrillator at the end of life

at home: a clinical case





Initial situation

- Man, aged sixty years old, heart failure (NYHA IV, LVEF 20%), with an active Implantable Cardioverter Defibrillator (ICD), receiving home based palliative care
- First visit: Management of refractory dyspnea → Introduction of morphine per os
- Health deterioration and imminent signs of end-of-life
 - Asthenia, altered state of consciousness, oliguria
 - Experience of repeated shocks which was related to pain and significant discomfort
 - His face was tugging, and his body was twitching at each discharge
 - He was able to express that he wanted these shocks to stop





Approach

Organization of a network: Independent nurse, palliative nurse specialist (Voltigo), patient and his wife, general practitioner

→ Ethical issues and priority elements: No reanimation, imminent signs of end of life, explanation of the deactivation of ICD

General practitioner contacted cardiologist → not possible to engage at home → Decision: **go get a magnet** in the cardiology unit of the hospital

Back to the patient's home: Re-explanation of the deactivation of the ICD, consent of the patient and his wife

Few minutes after the deactivation: Relaxed face, thanks

→ Death of patient during the night



Findings

For the patient and the family

- Relaxation and comfort for the patient
- The shocks were experienced as contributing to patient suffering. The ICD deactivation was experienced by the family as a relief.

For health care providers

- The observation of the patient experiencing painful shocks urged us to act
- No similar experience before, neither were guidelines familiar to us
- The opportunity to collaborate tightly with the general practitioner was crucial
- Purchase of a magnet by the mobile palliative care team





Reflexions

- Personal difficulty:
 - The act of posing the magnet
- The number of people wearing ICD is increasing:
 - ↑ elderly population & ↑ survival rates for patients with heart failure
- This problem should be discussed beforehand with the person and integrated into advance care planning, as described by recommendations:
 - "ICD deactivation at end of life needs to be part of the pre-implantation consent and counselling process, and formalised in advance care planning
 - Tailored information about deactivation should be provided to patients and their families when health deteriorates and at end-of-life "(Thanavaro, 2013; Agency for Clinical Innovation, 2014; British Heart Foundation, 2013)





References

- Agency for Clinical Innovation. New South Wales Guidelines for Deactivation of Implantable Cardioverter Defibrillators at the End of Life [Internet]. 2014 [cited 2021 May 20]. Available from: www.aci.health.nsw.gov.au
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- Thanavaro, JL. ICD Deactivation: Review of Literature and Clinical Recommendations. Clin Nurs Res. 2013 Feb;22(1):36–50.





Thank you for your attention

Josepha.girard@hefr.ch

Haute école de santé Fribourg Hochschule für Gesundheit Freiburg Route des Arsenaux 16a 1700 Fribourg/Freiburg

T. 026 429 60 00 heds@hefr.ch www.heds-fr.ch

