


LETTER TO THE EDITORS

Organ donation following euthanasia starting at home

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Dear Editors,

Euthanasia is considered as compassionate care in five countries (including the Netherlands, Belgium and Canada) when requested by patients experiencing unbearable suffering without prospect of relief [1].

Organ donation after euthanasia (ODE) was first described by Detry *et al.* in 2008 [2]. Since then, ODE is increasingly requested by euthanasia patients wishing to do good with the diseased body that led them to choose euthanasia [3]. ODE is legal in the Netherlands and Belgium and endorsed by Eurotransplant [3–6]. However, the procedure has occurred only 36 times in the Netherlands, while euthanasia was performed 5856 times in 2016 alone [3,7]. To assist responsible implementation, a national “ODE guideline” was introduced [3].

In the Netherlands, euthanasia is generally performed in the comfort of the patient’s home by his general practitioner (GP) [7]. However, ODE requires hospital admission [3]. The prospect of experiencing death in hospital is a key reason why euthanasia patients ultimately decide against ODE [3]. We developed a “domestic ODE” (ODED), overcoming this hurdle. Following analysis by the hospital executive board, ethics board and public prosecutor, this procedure was approved. The key is temporizing euthanasia between premedication and death, separating the experience of dying at home from subsequent biological death and organ donation in hospital using an anaesthesia bridge.

The new procedure was first performed at the request of a patient after 3 years suffering from amyotrophic lateral sclerosis. In April 2017, the patient considered his suffering unbearable and his GP confirmed that the

“due care” requirements under Dutch law were met [5]. On the appointed day, the GP attended the patient’s home where the anaesthesiologist-intensivist was waiting outside. Following oral administration of midazolam (sedative), the patient gradually fell asleep surrounded by family. After 50 min, he became nonresponsive, the signal for the waiting anaesthesiologist-intensivist to commence bag-valve-mask ventilation, administration of propofol (anaesthetic) and rocuronium (muscle relaxant) intravenously and finally endotracheal intubation. Subsequent ambulance transfer under anaesthesia to hospital took 45 min. Two minutes after lethal injection, the patient’s arterial pulse ceased, with confirmation of death 5 min later followed by organ procurement [5,8,9]. Four hours after death, the patient’s body returned home for continuation of the bereavement process by his family. The procedure was well received by family, patient and medical staff.

The decision to proceed with euthanasia/ODED is complicated and generally follows a long-term, intense process involving patient, family and GP. The primary aim of designing ODED is fulfilling the patient’s final wishes to do something good. This explicit wish justifies the artificially controlled stages in the process of death and the movement of the body. Extra costs are paid by the organ procurement organization. Cardiorespiratory stabilization during anaesthesia was a potential problem. We agreed with the patient beforehand that in this situation, lethal medication would be injected immediately. The only consequence would be losing the opportunity to donate.

Careful consideration of “due care” criteria and safeguarding patient autonomy, particularly against conflict of interests, are paramount to justify ODED. It must always be an autonomous choice by the patient, and the organs procured should remain a secondary benefit.

Visual Element : Patient explaining his choice. http://gezondheid.eenvandaag.nl/tvitems/74007/als_patient_donates_his_organ_after_euthanasia

REFERENCES

1. Webster PC. Canada debates medically assisted dying law. *Lancet* 2016; **387**: 1893.
2. Detry O, Laureys S, Faymonville M-E, *et al.* Organ donation after physician-assisted death. *Transpl Int* 2008; **21**: 915.
3. Dutch Transplant Foundation (NTS). Guideline for Organ Donation after Euthanasia, March 2017, part 1 and 2. Han Mulder, Gert Olthuis, Marion Siebelink, Rik Gerritsen, Ernst van Heurn. http://www.transplantatiestichting.nl/sites/default/files/product/downloads/richtlijn_organadonatie_na_euthanasie_deel_1_def.pdf with English Summary, http://www.transplantatiestichting.nl/sites/default/files/product/downloads/richtlijn_organadonatie_na_euthanasie_deel_2_def.pdf
4. Ysebaert D, *et al.* Organ procurement after euthanasia: Belgian experience. *Transplant Proc* 2009; **41**: 585. <http://www.ncbi.nlm.nih.gov/pubmed/19328932> [Accessed November 12, 2014]
5. Royal Dutch Medical Association (KNMG)/Royal Dutch Pharmacists Association (KNMP). Guidelines for the Practice of Euthanasia and Assisted Suicide, August 2012. <https://www.knmg.nl/advies-richtlijnen/dossiers/euthanasie/viewpoints-and-guidelines-euthanasia.htm> [Accessed 19-4-2017]
6. Eurotransplant International Foundation. Annual Report 2008 of the Eurotransplant International Foundation. Leiden: Oosterlee A, Rahmel A, 2008. https://www.eurotransplant.org/cms/mediaobject.php?file=ar_2008.pdf Page 24
7. Regional Euthanasia Review Commission. Annual Report 2016. <https://zoek.officielebekendmakingen.nl/blg-804950.pdf>
8. Dutch Transplant Foundation. Model protocol for post-mortal organ and tissue donation 2015 v9.5 2017. https://www.transplantatiestichting.nl/sites/default/files/modelprotocol_postmortale_organ_en_weefsel_donatie.pdf
9. Health Council of the Netherlands. Determining Death in Postmortal Organ Donation – Protocols and Criteria, Including an Updated Brain Death Protocol, 2015. Available from: <https://www.gezondheidsraad.nl/en/task-and-procedure/areas-of-activity/optimum-healthcare/determining-death-in-postmortal-organ>
10. Dutch House of Representatives: Answers by the Minister of Health to questions by MPs Rouvoet and Schutte regarding organ donation and euthanasia. Actions Appendix 1998/99, KVR7950 2979814020. <http://parlis.nl/pdf/kamervragen/KVR7950.pdf>