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What is Death and Why Do We Insist on the Dead Donor Rule? A Response to Our Critics

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What is death: a process or a specific declaration? Is it a biological continuum of events or a decision based on medical, ethical, and legal criteria? In our view, it is both, and there are philosophical and theological, but also very pragmatic reasons why the problem of death puts our ethical concerns to the test. The procedures of organ donation, either following brain death or after circulatory arrest, reveal a critical need to discuss, to define and sometimes even to jeopardize our judgments and sensibilities on the issue.

In most cases, we contend, the question whether a patient is dead or not seems medically and even philosophically clear. Still, the many intriguing and sharp responses to our article on cDCD and the dead donor rule, for which we are most grateful, indicate that clinical praxis sometimes verges on the borders of our established rules and procedures. That points to our main reason for reconsidering the dead donor rule (DDR): As soon as we raise the question of death, we are also delving into the question of human life and its value. In the following, we will do our best to answer some key issues raised in the responding articles, but we can by no means do justice to all. And to those commentators who were concerned that we undermine ethical principles, we will once more confirm that we need the DDR in order to protect life and human dignity in the procedures of transplantation medicine. However, we will here pick up on three points that may serve the purpose of further clarifying our argument: (i) When are cDCD donors dead? (ii) How can we discuss the DDR constructively in order to rediscover its purpose? (iii) What do we mean by causation and 'vital organs' when it comes to definitions of death?

WHEN ARE CDCD DONORS DEAD?

Among the many perceptive responses to our article on cDCD and the DDR (Busch and Mjaaland 2023), we have noticed that a number of scholars are concerned that we will open up the Pandora's Box of harvesting any organ from living donors as long as it does not *cause* death (Clarke 2023; Johnson 2023; Menikoff 2023; Schiff and Parent 2023). We can assure our critics: That is by no means our intention. In the article, we do not discuss the case of donation from living donors, which requires other principles for protection, such as the principle of no-harm and voluntariness. What we do argue, is that whether death is declared or not depends on ethical and legal criteria, yet the physician often needs to take decisions in a situation where death is still an ongoing biological process. Even when the process of dying seems irreversible, determining death requires careful procedures and robust institutions that safeguard the principle of protecting life (Bernat 2023).

Although we are inclined to think that donors in all cDCD-protocols are dead following the 5-minutes no-touch period, that is not the issue we are trying to settle. Instead, the scope of our article is to discuss the question: "[E]ven if we assume that the plain meaning of irreversibility is required before the determination of death is valid, does this entail that cDCD cannot comply with the DDR?" Biologically, dying and even "death" is a long process that still goes on at the time when death is declared. The physician knows that there is *living* organic material within the dying patient that may save other lives. This makes the need for ethical principles such as the DDR all the more significant (Batra and Latham 2023; Napier 2023). The 5 minutes limit is to some extent arbitrary, but we argue that it is *sufficient* in order to secure the dignity of the patient, indicating that the organism biologically is "dead enough" for the ethical and medical declaration of death. We hope that this specification makes some points of our argument clearer.

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THE SCOPE OF THE DEAD DONOR RULE

Some of the responses accuse us of relying too heavily on the authority of John Robertson in formulating our understanding of the DDR, alternatively that our interpretation of his articles is incorrect (Courtwright 2023; Holm 2023; Khan and Klitzman 2023; Padela and Lizza 2023; Ross 2023). It is true that Robertson is our key reference here. The reason why we have chosen this version of Robertson's formulation, however, is not merely because it counts as classical, but because it is the *best* formulation we have come across. Moreover, it allows us to discuss death not merely as a philosophical question of ontology ("to be or not to be"), but as a *pragmatic* problem facing the relatives and the medical team in the clinic (Shaw, Nabozny, and Kaufman 2023). Although we are philosophers and not medical specialists, we work on a team with medical doctors and scientists doing research on the prospects of improving our procedures for organ donation. Hence, from the outset, the purpose of our argument was in accordance with those who argue that pragmatic challenges of applying the rule seem more important than its precise formulation (Batten et al. 2023; Dalle Ave and Sulmasy 2023; Morrissey 2023). With or without Robertson, we find it significant to emphasize that the DDR only requires that organ donation does not *cause* death, and that this is sufficient for applying the rule both in cases of brain death and circulatory arrest.

The DDR is a deontological rule. Hence, as Gross (2023) argues, the rule requires universal respect even though we might be able to save five or more people at the expense of one person. The rule is derived from the moral obligation not to cause harm, also known as the principle of nonmalefience, which can be specified into a range of more specific moral rules such as "do not kill" or "do not cause pain or suffering" (Omelianchuk 2023). Can a dead person, then, experience pain or suffering? If we are able to draw the exact line between life and death, we do not think so. The dead body is a corpse rather than an organism. The DDR is, however, a rule that ought to help us navigate in the less clear landscape of limits between life and death. We assume that, biologically, the organism in the relevant cases is in a process of dying. Hence, procuring "vital organs" means causing or accelerating the death process. This is prohibited by the DDR. What a "vital" organ is (and what may cause harm or death) might differ from case to case, from patient to patient. Hence, the physician ought to make a *judgment* that respects the principle of neither causing harm nor death in order to act in accordance with the deontological rule.

This being given, however, there are many incidents where it seems void of hope, and even harmful to the patient, to continue life-supporting treatment. In such cases, the physician would intervene in the process of dying, in the sense of removing life support—and is entitled to do so. It could be argued that this is an arbitrary (willed) intervention, and yet the physician is obliged to take such decisions. However, such decisions based on a comprehensive evaluation of the patient's health condition and prospects of survival, should not be considered the triggering *cause* of death, although it remains one out of numerous aspects in the continuous flow of causation. Hence, the intention of our argument in applying the notion of causation and vital organs is to show that the DDR remains valid even in cases where removal of life support results in cardiac arrest and thus the declaration of death that allows for organ procurement and transplantation. As soon as death is declared, the organ could be removed since it has no *vital* function for the biological process of dying which in such cases fall under the category of an 'irreversible' process. Even in cases where NRP and ECMO is applied, the medical intervention should not reverse the ongoing biological process of dying. Again, a formulation of the DDR focusing on causation and organs vital for life in the case-specific trajectory toward (the declaration of) death is in our view decisive for the purpose of clarification, in particular for the physician who needs criteria relevant for judgment in critical and complex situations.

CLARIFICATION OF THE NOTIONS OF "CAUSATION," "VITAL ORGANS" AND "TRAJECTORY TOWARD DEATH"

Several of the responses we received, have expressed a concern that allowing organ procurement from someone who is dying would invite a slippery slope where organs could be procured from still living individuals who are terminally ill, or who have planned euthanasia (Clarke 2023; Holm 2023; Padela and Lizza 2023; Schiff and Parent 2023). We acknowledge these concerns and agree that we should be aware of misuse when applying this logic to organ donation. We think, however, that with the conceptual clarification above, ethical awareness among professionals, and robust systems for organ transplantation in place, such misuse can be avoided. We wish to clarify that there is a distinct difference between the patients we have referred

to as cDCD candidates in our article and individuals who have planned euthanasia or who are terminally ill, yet still alive and in a relatively stable condition. In our understanding, the term 'inevitable trajectory toward death' applies if and only if the organism's ability to function as an integrated whole by itself has been correctly ruled out, cf. the no-touch period to rule out the possibility of autoresuscitation, if there is a DNR in place, and given that no external efforts at resuscitation will be attempted.

This description fits the donors we currently allow in cDCD-protocols but would not fit individuals who are terminally ill or with euthanasia planned. The fact that euthanasia is planned, would not *per se* mean that death is inevitable. It has been reported that individuals have changed their mind after euthanasia has been planned. Similarly, in the case of the terminally ill, their death does not seem inevitable in the same way as the patients who are currently used as cDCD-donors. The terminally ill might discover that an investigational drug is able to prolong their life-expectancy, perhaps even for consecutive periods. Although the chances that life will continue for both the terminally ill and the person who has decided upon euthanasia, are slim, they are none the less still present.

In this regard it also seems important to clarify that we are not arguing that as soon as someone is enrolled in a cDCD-protocol, procurement of organs comply with the DDR. It is only when life-support has been withdrawn, respiration and circulation has stopped, and autoresuscitation has been ruled out, that organs can be procured in compliance with the DDR. Further, contra Kreitmair (2023), we want to emphasize that we believe that donors in this state—with permanent loss of circulatory and respiratory function—are rightly declared dead. Our argument is meant to answer the question, "if functions are meant to be lost irreversibly in the strict sense of the term, would that make cDCD non-compliant with the DDR?"

Another criticism is directed at our claim that organ removal procedures in cDCD does not cause death. This is especially important in cDCD protocols where NRP is involved (Entwistle and Sade 2023; Karches et al. 2023). In some of the articles, a counterfactual theory of causation is used to illustrate that it is in fact the ligation of vessels in NRP-cDCD that causes the death of the donor. Courtwright (2023) applies the counterfactual account of causation described by Lewis in 1974:

> (…) c is a cause of e just in case had c not occurred, e would not have occurred and there exists a causal chain leading from c to e (Lewis 1974).

Courtwright then uses this account to claim that if exclusion of cerebral circulation had not occurred, permanent loss of brain function would not have occurred and concludes that: "In NRP, the event (e) is the permanent loss of brain function, and the cause (c) is occlusion of the cerebral circulation." (Courtwright 2023). A similar counterfactual argument is made by Lazaridis (2023). Thus, they conclude that it is the exclusion of cerebral circulation that causes death. At this point, we simply disagree since the person is already dead due to circulatory arrest and would not need to die twice. The reference to loss of brain function would neither alter nor add to this conclusion. It is merely a technical measure to avoid any risk of blood flow to the brain.

Let us explain how this affects the question of causation. While we agree that the counterfactual analysis is possible, we do not agree that this is the only counterfactual analysis available. We might as well state that in NRP-cDCD, the event (e) is the loss of permanent brain function, and the cause (c) is the traumatic brain injury. Loss of permanent brain function would not have occurred without the traumatic brain injury, and a causal chain leading from c to e exists. Several causes will exist that help explain the event (e), but just because something is *a* cause, would not entail that it is *the* cause. As described in one of the responses:

> (…) the conclusion that we can draw is that the nonreversible chain of events triggered by the decision to withdraw life-sustaining treatment, strengthened by the do not resuscitate order but caused by the original pathology of the patient, destines the patient to death (Wall and Testa 2023).

Courtwright (2023) argues that our causal interpretation adds another layer of metaphysical complexity because we need to know what a cause is. However, we will argue that the causal explanation we look for here is *pragmatic* rather than metaphysical. In the treatment or non-treatment of patients, the physician is considering causal consequences of possible interventions (or lack thereof) all the time. The considerations are based on experience and knowledge. They would theoretically be compatible with various theories of causation, yet we cannot avoid the causal connection between intervention and event. Even when applying the DDR, as presented in many of the responses, it is, additionally to the death requirement, required that death is not caused by or

for organ procurement. While establishing what causation is from a theoretical standpoint might seem to invite a lot of complexity, physicians identify causes of death and make prognoses of the futility or effectiveness of treatment daily. Our approach to the DDR does not require physicians to analyze complex causal chains, but to continue their practice of making prognoses and diagnoses and let another team of physicians prepare for the procurement of organs once it is evident that the injury or disease will cause the death of the patient. The biological process of dying is followed closely and monitored as precisely as possible. Declaring death relies on a set of criteria that are legal, ethical, and philosophical, hence, they rely on conditions that are beyond the sphere of biology and medicine. A deontological rule such as DDR is vital for the general trust in procedures of organ donation and helps navigating in clinical situations that are unclear and require the specialist's professional integrity and power of judgment. We have argued that at the current state of medical technology, cDCD of abdominal organs is defendable and complies with the most reasonable interpretation of DDR. Whether it also complies with the use of NRP in thoracic donation is a slightly different question, to be discussed in further detail in a separate article.

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REFERENCES

Batra, R. K., and S. R. Latham. 2023. The dead donor rule, reversibility and donor wishes. *The American Journal of Bioethics* 23 (2):31–2. doi:10.1080/15265161.2022.2159581.

Batten, J. N., R. O'Meeghan, P. A. Catarino, M. Nurok, and M. P. Cotler. 2023. Changing the focus in the donation after circulatory death debates. *The American Journal of Bioethics* 23 (2):48–9. doi:10.1080/15265161.2022.2159094.

Bernat, J. L. 2023. Clarifying the DDR and DCD. *The American Journal of Bioethics* 23 (2):1–3. doi:10.1080/15265161.2022.2159585.

Busch, E. J. N., and M. T. Mjaaland. 2023. Does Controlled Donation after Circulatory Death Violate the Dead Donor Rule? *The American Journal of Bioethics* 23 (2):4–11. doi:10.1080/15265161.2022.2040646.

Clarke, M. J. 2023. Never let me go: "Almost dead" isn't good enough. *The American Journal of Bioethics* 23 (2): 60–1. doi:10.1080/15265161.2022.2159586.

Courtwright, A. M. 2023. Normothermic regional perfusion, causes, and the dead donor rule. *The American Journal of Bioethics* 23 (2):46–7. doi:10.1080/15265161.2022.2159571.

Dalle Ave, A. L., and D. P. Sulmasy. 2023. Death lost in translation. *The American Journal of Bioethics* 23 (2): 17–9. doi:10.1080/15265161.2022.2159098.

Entwistle, J., and R. Sade. 2023. Don't leave the heart behind. *The American Journal of Bioethics* 23 (2):38–40. doi:10.1080/15265161.2022.2159573.

Gross, J. A. 2023. Donor rules—dead and living. *The American Journal of Bioethics* 23 (2):61–3. doi:10.1080/15265161.2022.2159577.

Holm, S. 2023. Some problems with the 'it has been decided that you will die and are no longer in need of your organs donor rule. *The American Journal of Bioethics* 23 (2):26–8. doi:10.1080/15265161.2022.2159095.

Johnson, L. S. M. 2023. DCD donors are dying, but not dead. *The American Journal of Bioethics* 23 (2):28–30. doi:10.1080/15265161.2022.2159584.

Karches, K.,. E. K. Salter, J. T. Eberl, and P. McCruden. 2023. Dead enough? NRP-cDCD and remaining questions for the ethics of DCD protocols. *The American Journal of Bioethics* 23 (2):41–3. doi:10.1080/15265161.2022.2159578.

Khan, A. N., and R. Klitzman. 2023. The needs to focus on process and precise language in ethical determination of cDCD. *The American Journal of Bioethics* 23 (2):50–2. doi:10.1080/15265161.2022.2159582.

Kreitmair, K. 2023. Why we still need a substantive determination of death. *The American Journal of Bioethics* 23 (2):55–7. doi:10.1080/15265161.2022.2159583.

Lazaridis, C. 2023. Cerebral circulatory arrest and the dead donor rule. *The American Journal of Bioethics* 23 (2):43–5. doi:10.1080/15265161.2022.2159572.

Lewis, D. 1974. Causation. *Journal of Philosophy* 70 (17): 55–67.

Menikoff, J. 2023. Is transparency about the line between life and death good for organ donation? *The American Journal of Bioethics* 23 (2):24–6. doi:10.1080/15265161.2022.2159580.

Morrissey, P. 2023. Pragmatic aspects of controlled donation after circulatory death and ethical considerations for alternative approaches. *The American Journal of Bioethics* 23 (2):14–7. doi:10.1080/15265161.2022.2159251.

Napier, S. 2023. The dead donor rule is not morally sufficient. *The American Journal of Bioethics* 23 (2):57–9. doi:10.1080/15265161.2022.2159574.

Padela, A., and J. P. Lizza. 2023. Donors and organs at the borders of vitality and public trust: Why DCD donors must be dead and not dying. *The American*

Journal of Bioethics 23 (2):53–5. doi:10.1080/15265161.2022.2159579.

Omelianchuk, A. 2023. Protecting life and ensuring death—confounding the dead donor rule. *The American Journal of Bioethics : The American Journal of Bioethics* 23 (2):20–2. doi:10.1080/15265161.2022.2159097.

Ross, L. 2023. The dead donor rule does require that the donor is dead. *The American Journal of Bioethics* 23 (2):12–4. doi:10.1080/15265161.2022.2159096.

Schiff, T., and B. Parent. 2023. Not dead, but close enough? You cannot have your cake and eat it too in satisfying the DDR in cDCD. *The American Journal of Bioethics* 23 (2):22–4. doi:10.1080/15265161.2022.2159093.

Shaw, M. H., M. J. Nabozny, and D. Kaufman. 2023. Almagest again? An epistemological critique of Nielsen Busch and Mjaaland. *The American Journal of Bioethics* 23 (2):33–5. doi:10.1080/15265161.2022.2159576.

Wall, A., and G. Testa. 2023. Defining the cause of death and vitality of organs in the ethical analysis of controlled donation after circulatory death procedures. *The American Journal of Bioethics* 23 (2):35–8. doi:10.1080/15265161.2022.2159575.