

Cryothanasia: A Medical Law Definition

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ABSTRACT

Human cryoconservation, also known as cryonics, is one of the most fascinating and complex topics in medical law due to its interdisciplinary nature. A compelling example of this is the concept of cryothanasia, which simultaneously encompasses two seemingly opposite notions: euthanasia and cryonics. In this sense, cryothanasia represents a new approach to the disposal of the human body. Given this context, this short research paper focuses on cryothanasia, specifically its meaning and potential future applications.

Keywords: Cryothanasia; Cryonics; Euthanasia; Human Preservation; Disposal of Human Body

Introduction

By the neologism ‘cryothanasia,’ we refer to a new model of euthanasia—specifically, a novel method for the disposal of one’s own body. Cryothanasia simultaneously encompasses the concept of euthanasia and the application of cryonics procedures. (de Gioia Carabellese, et al. [1]). Thanks to this new technique, individuals may have the opportunity to pause their life and, at a later stage, resume the course of their existence. Specifically, under certain circumstances—such as a terminal illness or limited healthcare resources— cryothanasia allows for the ‘suspension’ of life, with the possibility of reawakening at a future time. During this intermediate state between life and death, the suspended individual is expected to remain in conditions similar to a pharmacological coma. Consequently, in this particular case, cryonics may serve a medical and ethically justifiable purpose. Given this factual background, it becomes essential to examine the concept of cryothanasia. Therefore, in the following paragraphs, cryothanasia will be analyzed both from a linguistic perspective and through the lens of its practical application

Cryothanasia: A Linguistic Standpoint

Cryothanasia signifies “medical procedure aiming at painlessly pausing the life of a person affected by unbearable, prolonged, and incurable suffering in the hope of one day being able to resume and

extend her life”. (Minerva, et al. [2]). From another perspective, cryothanasia is defined as a ‘new’ form of euthanasia, (Jinauru [3]) thus, cryothanasia appears as the ‘medical’ bridge between cryoconservation and the end of life via a medical treatment, i.e., euthanasia. The greatest goal achieved throughout this new futuristic medical technology is to extend life and health with a joint application of two opposite concepts: euthanasia and cryo-conservation. Prima facie, these terms, associated with each other, appears as oxymoron (Moen [4]) since cryonics represents the anti-euthanasia arguments. In this respect, cryothanasia has, at least, the aim to ‘suspend’ those affected by serious illnesses to extend their lives. To elucidate, individuals affected by a severe or terminal illness—if and when cryothanasia becomes legal—may request that a physician end their suffering. This would involve discontinuing medical treatment, ceasing efforts either to prolong their lifespan or to provide medication. Consequently, cryothanasia offers patients the simultaneous opportunity to achieve euthanasia’s primary goal (ending suffering) while also pursuing cryonics’ aim: to live again, free from the negative consequences of their illness.

In Between Cryonics and Euthanasia: Some Scientific Glances

As highlighted above, cryothanasia encapsulates two seemingly opposite notions: cryoconservation and euthanasia. Beginning with

cryoconservation, the reference generally pertains to cryonics techniques. It is worth emphasizing that, from a broader perspective, cryoconservation is one of the most widely discussed topics within medical law. Traditionally, this medical practice has been associated with *in vitro* fertilization and the cryopreservation of embryos. The scientific origins of cryoconservation date back to the 19th century, when scientists first discovered their ability to liquefy gases at extremely low temperatures. At this stage, cryogenics was merely a technique for gas liquefaction, leading to breakthroughs such as the discovery of superconductivity and the development of liquid hydrogen. It was not until the 20th century that cryogenic cooling was explored for medical applications. More precisely, during the Spanish Flu pandemic, the need arose to store blood, cells, and even organs for future transplantation. An additional advancement in this field is the conservation of the entire human body. Specifically, human cryoconservation pertains to the preservation of a frozen and ‘suspended’ human body with the intent of extending life once scientific advancements make revival possible.

From a terminological perspective, it is worth noting that some scholars distinguish between cryonics and cryoconservation. Cryonics is considered a niche application of cryoconservation. In this regard, cryoconservation refers to the process of freezing human cells—such as sperm, blood, and tissues—while cryonics, by contrast, pertains to the preservation of an entire human being (or animals) at extremely low temperatures. (Pavankumar, et. al. [5]). Nevertheless, the two terms are often used interchangeably. Another relevant term from a terminological perspective is ‘hibernation,’ which refers to a state of inactivity, metabolic depression, and hypothermia. This condition is characterized by a lowered body temperature, reduced breathing frequency, slowed heart rate, and decreased metabolic activity. (Gunn [6]) The other notion encapsulated into cryoconservation is euthanasia which signifies gentle and easy death. (Patil [7]). Furthermore, euthanasia, potentially, should be defined as either an action or an omission which is suitable to cause death in order to eliminate all suffering. (Kuhse, et al. [8]).

The Medical Law Perspective

The main feature—perhaps even the essence—of cryoconservation is the terminal patient’s desire to be cryopreserved after their legal death, with the hope of a future opportunity for successful reanimation (Cohen [9]). Nevertheless, it is argued that “good death and immortality do not imply any direct intervention in the natural process of dying or the deferral of death by cryoconservation”. The explanation for this lies in the circumstances under which both euthanasia and cryonics necessitate an act of power and authority—an authority traditionally attributed solely to God. In both cases, there is a fundamental shift in the role and mission of medical specialists (Vulcănescu [10]) Moving forward, it is important to recognize that cryoconservation contains a significant, yet often overlooked, element: the patient’s desire to ‘pause’ life to relieve pain while simultaneously extending their

lifespan. In principle, the underlying concept of cryoconservation may bear similarities to anaesthesia, *mutatis mutandis*. More specifically, cryoconservation aims to preserve and prolong life in situations where the only alternative is suffering and, ultimately, death. Fundamentally, cryoconservation introduces the possibility of actively preventing death. However, as with any medical treatment, cryoconservation carries potential drawbacks.

A patient who requests cryoconservation would receive palliative care, yet they might also develop a profound desire to outlive their current prognosis—choosing, in essence, to exist in the future (Minerva [11]). Given that modern versions of medical oaths often emphasize the duty to apply ‘all necessary measures’ for the benefit of sick patients, if cryoconservation were truly the last option for a dying individual to survive, it could be considered a required measure in the patient’s best interest. Nevertheless, this perspective must be examined alongside another critical consideration: cryoconservation is still an experimental medical treatment. While physicians have a duty to act in the best interests of their patients, the autonomy of the individual remains paramount, allowing them to make personal decisions regarding medical interventions. Ultimately, cryoconservation should be regarded as a medical treatment—albeit an experimental one—only in cases involving terminally ill patients. For these individuals, the only alternative is immediate death; thus, cryoconservation could serve their best interests.

Conclusion

Before the Covid-19 pandemic, it was a trite statement that cryoconservation uses resources that could be allocated to more urgent needs (Minerva, et al. [11-13]). From a different perspective, if cryoconservation becomes a successful medical treatment, it could serve as an effective alternative in situations where healthcare resources are insufficient. The central premise of this paper is that cryonics may, under specific conditions, evolve into a legitimate scientific and medical practice. Logically, if another instance of healthcare resource scarcity arises, cryoconservation might present itself as a viable solution. More specifically, cryoconservation would enable medical professionals to ‘suspend’ a patient’s life, allowing for the optimal allocation of available resources. Furthermore, in the face of emerging diseases, cryoconservation could provide physicians with the necessary time to study, analyze, and understand new illnesses before proceeding with treatment.

References

1. de Gioia Carabellese P, Della Giustina C (2024) The Law of Cryonics: A Legal, Philosophical and Financial Analysis. Routledge: London and New York.
2. Minerva F, Sandberg A (2017) Euthanasia and cryoconservation. *Bioethics* 31(7): 526-533.
3. Jinauru A (2012) The practice of euthanasia – a criminal or compassionate act? Knowledge and Action within the Knowledge Based Society. In: D Dunca, C Găspărel (Eds.), *Political Philosophy, Ethics, Psychology and Educational Sciences Proceed*. Washington: Institutul European, pp. 149-167.

4. Moen OM (2015) The case for cryonics. *Journal of medical ethics* 41(8): 677-681.
5. Pavankumar K, K Madhavi, J Sunayana, M Sai Ganesh (2022) Cryonics: A Review. *International Journal of Pharmaceutical Sciences and Research* 13(1): 95-100.
6. Gunn C (2017) *A Comprehensive Introduction to Cryobiology*. New York: Larsen and Keller Education.
7. Patil T A (2013) Euthanasia – Ethical and Legal Perspectives. *Journal of Health Sciences* 1(1): 7-10.
8. Kuhse H Udo, S Singer P (2015) *Bioethics: An anthology*. Boston: John Wiley & Sons.
9. Cohen J (2020) Frozen Bodies and Future Imaginaries: Assisted Dying, Cryonics, and a Good Death. *Religions* 11(11): 584-601.
10. Vulcănescu S-G (2022) The Paradoxical Death through Cryoethanasia or Playing God. A Moral-Theological Approach. *Journal of Intercultural Management and Ethics* 5(1): 29-36.
11. Minerva F (2018) *The Ethics of Cryonics. It is Immoral to be Immortal*. London: Palgrave Macmillan.
12. Cooper L (1997) Myalgic encephalomyelitis and the medical encounter. *Sociology of Health & Illness* 19(2): 186-207.
13. Rachel J (1975) Active and Passive Euthanasia. *The New England Journal of Medicine* 292(9): 78-80.

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