HHS Public Access

Author manuscript

Am J Transplant. Author manuscript; available in PMC 2020 August 01.

Published in final edited form as:

Am J Transplant. 2019 August ; 19(8): 2391–2392. doi:10.1111/ajt.15506.

Overcoming challenges of lung recovery from uDCDDs – Felicidades!

Thomas M. Egan[1,2], **John Jacob Requard III**[3]

[1]Professor of Surgery, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

[2]President, Lung Banks of America, Chapel Hill, North Carolina

[3]Vice-President, Lung Banks of America, Chapel Hill, North Carolina

To the Editor:

We write to congratulate Dr. Suberviola and colleagues for their success transplanting lungs recovered from uncontrolled Donation after Circulatory Determination of Death donors (uDCDDs)(1). Although their institution is not in a densely populated area, they showed convincingly that uDCDDs can provide lungs that can be safely transplanted. Their excellent survival (only one death from sepsis with 7 survivors, mean follow-up 52 months), is very encouraging and may be due to their careful and rigorous selection criteria. Clearly, uDCDDs can safely add to the lung donor pool to increase the number of lung transplants. What was the CLAD-free survival?

Eight patients suffering from end-stage lung disease received lung transplants that may not have happened without using this new donor source. Notably, three lung transplants were performed in another hospital 450 km away. In the U.S., the FDA considers ex-vivo lung perfusion (EVLP) of lungs from uDCDDs investigational, which is why we acquired an Investigational Device Exemption to perform our NIH-funded study assessing lungs recovered from uDCDDs with EVLP using Steen solution(2). We concur with the authors' claim that organ recovery from uDCDDs "requires the development of new strategies designed to facilitate this type of donation." We found that many potential uDCDDs had medical comorbidities precluding transplant, or lung transplant in particular. Our organ procurement organization (OPO) insisted on obtaining consent from next-of-kin (NOK), even if decedents were registered, or first-person authorized (FPA) organ donors. This is similar to the policy in Spain of obtaining consent from NOK before organ recovery. In the U.S., the amended Uniform Anatomical Gift Act (UAGA), which was passed in 47 of 50 states, specifically prevents NOK from revoking permission for organ donation from FPA individuals(3). This provides FPA with the same legal "weight" as an advanced directive. The North Carolina (NC) Attorney General's office determined the NC UAGA not only allowed our OPO to acquire lungs from FPA decedents; the NC UAGA *required* our OPO to

Correspondence: Thomas M. Egan, thomas_egan@med.unc.edu.

Disclosure

The authors of this manuscript have no conflicts of interest to disclose as described by the *American Journal of Transplantation*.

recover lungs from FPA decedents, if we could not find NOK or could not obtain their consent, provided the organs might be transplanted, even in a clinical trial.

Suberviola et al. allude to the lung transplant reported by Sizuki et al. as evidence of transplanting lungs from an uDCDD in the U.S. However, that donor was a cDCDD who arrested in the ICU, and was transported to the operating room with CPR in progress. This is a Category IIb uDCDD, compared to Category I and IIa that we recovered, or Category I and IIa recovered by Suberviola's group(4). Suberviola's group, and others in Spain, resume CPR after death declaration. In the U.S., this is controversial. Dr. Bernat chaired a panel whose recommendations for organ recovery from cDCDDs were adopted. Another panel chaired by Dr. Bernat espoused that resumption of circulation or ventilation after death declaration was unethical and illegal(5). This view is controversial, and requires resolution to improve U.S. organ supply. Before brain death was defined, all lungs for transplant were recovered from uDCDDs.

Felicidades to Suberviola's group for persistence and success with lung transplant from uDCDDs!

Acknowledgment

Supported by NIH grant 1UM1HL113115-01A1

References

1. Suberviola B, Mons R, Ballesteros MA, Mora V, Delgado M, Naranjo S, et al. Excellent long-term outcome with lungs obtained from uncontrolled donation after circulatory death. Am J Transplant 2018. doi: 10.1111/ajt.15237.
2. Egan T, Blackwell J, Birchard K, Haithcock B, Long J, Gazda S, et al. Assessment of Lungs for Transplant Recovered from Uncontrolled Donation after Circulatory Determination of Death Donors. Ann Am Thorac Soc. 2017;14(Supplement_3):S251. doi: 10.1513/AnnalsATS.201609-687MG.
3. Kurtz SF, Strong CW, Gerasimow D. The 2006 Revised Uniform Anatomical Gift Act - a law to save lives. Health Lawyers News. 2 2007:44–9.
4. Thuong M, Ruiz A, Evrard P, Kuiper M, Boffa C, Akhtar MZ, et al. New classification of donation after circulatory death donors definitions and terminology. Transplant international : official journal of the European Society for Organ Transplantation. 2016;29(7):749–59. doi: 10.1111/tri.12776. [PubMed: 26991858]
5. Bernat JL, Bleck TP, Blosser SA, Bratton SL, Capron AM, Cornell D, et al. Circulatory death determination in uncontrolled organ donors: a panel viewpoint. Annals of emergency medicine. 2014;63(4):384–90. doi: 10.1016/j.annemergmed.2013.05.018. [PubMed: 23796628]