#### September 2023



## INTRODUCTION

Another three months gone by and another strong set of articles to review of the ISODP Journal Watch. As always, this issue focuses on a broad set of donation related issues. Two of the papers were recommendations, one a set of GRADE generated recommendations on DCD from the American Society of Transplant Surgeons and another a look at the 10 most important lessons from the widely promoted Spanish Model. Two other papers look at particularly ethically trying situations, one on how American physicians respond to refusals by patients of pediatric patients to accept a diagnosis of death determined by neurologic criteria, the other a report of 10 years of activity of donation after voluntary euthanasia in the setting of psychiatric disease. Finally, a scoping review covers the actual outcomes of neonatal referral for organ donation.

We hope you enjoy these articles and that we have a chance to see some of you at the upcoming fall conferences around the world. Thanks as always to Amina Silva, Aisha Adil, and Stéphanie Larivière. We were also joined by David Thomson from South Africa who summarized one of the articles!

We hope these editions encourage you all to explore the vast amount of work going on in our field and that the lessons learned bring real benefit to your systems and patients!

See you for the November issue!

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# American Society of Transplant Surgeons recommendations on best practices in donation after circulatory death organ procurement

#### P. Croome, K. et al. American Journal of Transplantation, February 2023

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This paper was published in the American Journal of Transplantation as an effort from the American Society of Transplant Surgeons to improve deceased organ donation processes. The recommendations presented were developed using GRADE methodology and was performed by a working group with diverse members from the society within two committees (Scientific Studies and Thoracic Organ Transplantation). The recommendations are supported by a literature review and a consensus process on the scope of the recommendations. This effort identified specific areas of concern or areas lacking standardization, including pre-withdrawal preparation, the definition of donor warm ischemia time, DCD surgical techniques, combined thoracic and abdominal procurements, and normothermic regional perfusion. The proposed recommendations have been categorized based on the strength of the supporting evidence and the level of recommendation. These recommendations aim to establish a consistent approach to DCD transplantation in the United States, where significant variability persists. They encourage transplant programs, OPOs, and hospitals to adopt standardized DCD protocols to enhance success rates, respect donor wishes, and improve the accuracy of future research on DCD organ outcomes.



# Organ Donation After Euthanasia in Patients Suffering From Psychiatric Disorders: 10-Years of Preliminary Experiences in the Netherlands

### Dijk, N. et al. Transplant International, February 2023

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In this paper, a reputed team of clinicians and researchers in the Netherlands presented the preliminary results of the 10-year Dutch case series of psychiatric patients who underwent MAiD (also known as voluntary euthanasia) followed by organ donation. Those authors performed a retrospective analysis of all patients who underwent organ donation after euthanasia due to a psychiatric illness from 2012 until January 2022 in the Netherlands. Over a decade-long study, 59,546 patients underwent MAiD, primarily driven by somatic disorders (58,912), with 634 individuals (1.1%) opting for the procedure due to psychiatric reasons. Of all MAiD patients, approximately 10% (5,955) were medically eligible to donate organs. Among somatic patients, 5,321 were theoretically eligible, but only 61 donated organs post-MAiD (1.1%) whereas 3.8% (24/634) of patients with psychiatric disorders donated organs after euthanasia. Since 2012, 85 patients donated organs after euthanasia, 24 due to psychiatric suffering and 61 due to somatic suffering. These 24 cases included individuals of varying genders with an average age of 48.6 years, resulting in 107 organ transplantations, primarily involving kidneys (46), lungs (35), liver (16), pancreas (5) and heart (2). In conclusion, while MAiD followed by organ donation for psychiatric reasons is legally and medically allowed in Dutch healthcare, ethical and practical complexities require thorough qualitative exploration before inclusion in national guidelines.

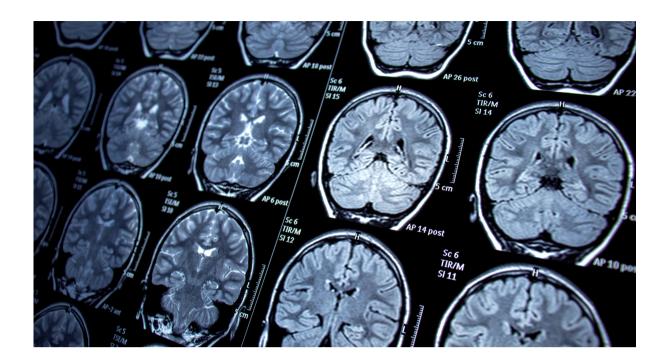


# Ten Lessons From the Spanish Model of Organ Donation and Transplantation

#### Streit, S. et al. Transplant International, May 2023

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Published in Transplant International this is a well written paper built from work for a recent Greek report aiming to create a "New National Plan for Solid Organ Donation and Transplantation". The authors do a good job in giving perspective on the Spanish Model in this narrative review and discuss ten key components they have identified from this system that could be targeted in other systems. For readers looking to engage with local policy leaders this paper can serve as a useful and concise resource with nuanced discussion. Commonly cited justifications for why local systems can't perform on the level at which Spain operates are discussed. Literature is quoted to highlight that deceased donation rates are not directly linked to ICU bed availability which can be illustrated by contrasting Germany with Croatia. The often-misplaced emphasis on the need for presumed consent legislation is placed immediately in context by stating that the Spanish system requests approval from every family. The authors shine a light on various components. Such as efforts to train professionals, especially with respect to family consultation and communication skills. They highlight the need for policymakers to review reimbursements for donation activity to identify any financial barriers to participation and the need for standardized evaluation and reporting of donation activity as a key strategy to improve quality. A three-tiered governance system with dedicated institutions to organ donation and transplantation on the national, regional, and hospital level together with a national coordinating authority supported in legislation are the overarching structure in effect in Spain. The authors also, rightly highlight the issue of public trust and support in the system, the needed transparency and accountability which comes with such governance and the close relationships with the media as key underpinnings of a high performing system.



# Refusals of the Determination of Death by Neurologic Criteria: A Mixed Methods Study of Physician Perspectives on Refusals Cases

## Paquette, E. et al. Pediatric Critical Care Medicine, August 2023

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The August issue of Pediatric Critical Care Medicine included this paper from Paquette and colleagues exploring spysician responses to parental refusal of Pediatric Determination of Death by Neurologic Criteria (DNC). While not directly a donation issue, donation specialists are often responsible for deal with difficult issues around death determination. While this study was based in the legal and cultural system of the United States, many of its lessons can be applied both beyond the US and certainly beyond pediatric cases. Of note, 80% of the 80 respondents reported having seen at least one refusal of DNC, suggesting that this issue requires close attention by practitioners.



# Potential of neonatal organ donation and outcome after transplantation

#### Bluhme, E. et al. Pediatric Transplantation, February 2023

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Bluhme et al. describe the potential of neonatal organ donation to increase the opportunity for increasing number of liver and kidney transplants. Many jurisdictions include neonatal populations within their referral algorithms. However, very few actual neonatal donations occur despite active referral programs. Though the potential has been a common conversation within pediatric hospitals and organ donation organization, there has been very little evidence proving the benefit to increasing transplant numbers. Bluhme et al have taken the first step to gather data with a systematic review of the current literature including 34 articles. Notably, none of the reviews primarily detailed neonatal organ donation or the transplantation of procured organs from neonatal donors. This highlights the lack of specific research in this area. Still, the review confirms a large pool of potential donor may be available especially with DCD but often referral rates are lower than adult population. 26 articles focussed on transplant outcomes including heart, kidney, and liver. The review finding suggest that transplant outcomes are favourable, though an increase in posttransplant thrombosis is noted. The results of this systematic review signal that further research might support better neonatal referral programs and might encourage transplant programs to be more aggressive in accepting neonatal organs for transplant.



# Organ Dysfunction Among Children Meeting Brain Death Criteria: Implications for Organ Donation

#### Nickerson, T. et al. Pediatric Critical Care Medicine, March 2023

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Children with brain death (BD) comprise a potential donor organ population however, concerns with respect to organ dysfunction following BD and its implications within this organ donor population remain unexplored. In this retrospective single-center cohort study, Nickerson and colleagues compared organ dysfunction in children with BD to those medically ineligible and explored reasons for why some organs are not donated from children with BD. A chart review was conducted at Nationwide Children's Hospital located in Ohio and included data from 2012-2018. Results showed that BD-declared children frequently donated organs even with some degree of organ dysfunction, depending on center-specific criteria for eligibility. Of the 58 patients included in this study, from newborn until 22 years of age, 59% donated at least one organ. Among the specific types of organs donated, both lung and heart donors from the BD cohort had similar levels of organ dysfunction with those that are deemed medically ineligible for organ donation. Liver donors had lower levels of markers for hepatic dysfunction than medically ineligible nondonors. Interestingly, these findings show that organs are still being procured and transplanted despite evidence of organ dysfunction. Future work is required in investigating transplant outcomes of such dysfunctional organs in recipients. In terms of reasons for nondonation of organs, some reasons include authorization denials, medical contraindications (eg. malignancies, infections), size mismatch, and lack of recipients. This study highlights the need for future work on analyzing the degrees of organ dysfunction for organ donation and the outcomes in posttransplantation before incorporating into a standardized eligibility criteria.