Organ donation

- Lipid lowering agents in solid organ transplant recipients
- The New Era of Organ Transplantation in Greece: Time to Converge With the Western World
- Incidence and risk factors for recurrent membranous nephropathy after kidney transplantation: a systematic review and meta-analysis
- What are we waiting for: Serious bacterial infections in children prior to liver transplant are associated with high morbidity but not expedited transplant
- Quantitative assessment of liver graft function using functional automated whole-liver score derived from gadoxetic acid-enhanced MRI: a prospective cohort study
- Deciphering the Interference of the Anti-Integrin α4β7 Vedolizumab With Cell Crossmatch
- Innate Lymphoid Cells in Pancreatic Ductal Adenocarcinoma: Immune Regulation and Therapeutic Implications
- Incidence and risk factors for recurrence of incisional hernia repair after liver transplantation: a retrospective cohort study

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Physicians should be aware that patients with poor neurological outcome can be candidates of brain death donation, and careful examination and rapid diagnosis is crucial. All segments of society and the health care professionals should be informed and updated about organ donation and brain death regularly to raise the numbers of organ donation [1)].

Since 2010, the number of organ donations in Germany has decreased by one third, mostly due to undetected organ donors. It is unclear, how the undetected potential donor pool is distributed among the different German hospital categories (A = university hospital, B = hospitals with neurosurgery, C = hospitals without neurosurgery) and region types.

Esser et al. performed a nationwide secondary data analysis of all German inpatient cases of the year 2016 (n = 20,063,689). All fatalities were regarded as potential organ donors, in which primary or secondary brain damage was encoded and organ donation was not excluded by a contraindication or a lack of ventilation therapy.

In 2016, 28,087 potential organ donors were identified. Thereof 21% were found in category A, 28% in category B and 42% in category C hospitals. The contact rate (= organ donation related contacts/ potential organ donors) and realization rate (= realized organ donations/ potential organ donors) of category A, B and C hospitals was 10.6% and 4.6%, 10.9% and 4.8% and 6.0% and 1.7%, respectively. 58.2% of the donor potential of category C hospitals was found in the largest quartile of category C hospitals. 51% (n = 14,436) of the potential organ donors were treated in hospitals in agglomeration areas, 28% (n = 7,909) in urban areas and 21% (n = 5,742) in rural areas. The contact- and realization rate did not significantly differ between these areas.

The largest proportion of potential organ donors and the lowest realization rate are found in category C hospitals. Reporting and donation practice do not differ between urban and rural regions [2)].

The continuing shortage of deceased donor organs for transplantation, and the limited number of potential donors after brain death, has led to a resurgence of interest in donation after circulatory death (DCD). The processes of warm and cold ischemia threaten the viability of DCD organs, but these can be minimized by well-organized DCD pathways and new techniques of in situ organ preservation and ex situ resuscitation and repair post-explantation. Transplantation survival after DCD is comparable to donation after brain death despite higher rates of primary non-function and delayed graft function. Countries with successfully implemented DCD programs have achieved this primarily through the establishment of national ethical, professional and legal frameworks to address both public and professional concerns with all aspects of the DCD pathway. It is unlikely that expanding standard DCD programs will, in isolation, be sufficient to address the worldwide shortage of donor organs for transplantation. It is therefore likely that reliance on extended criteria donors will increase, with the attendant imperative to minimize ischemic injury to candidate organs. Normothermic regional perfusion and ex situ perfusion techniques allow enhanced preservation, assessment, resuscitation and/or repair of damaged organs as a way of improving overall organ quality and preventing the unnecessary discarding of DCD organs. This review will outline exemplar controlled and uncontrolled DCD pathways, highlighting practical and logistical considerations that minimize warm and cold ischemia times while addressing potential ethical concerns. Future perspectives will also be discussed [3].

Organ donation after cardiac death

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References

1)
Mutlu NM, Peker TT, Acar S, Koca B, Soyal ÖB, Titiz AP, Çakır E, Göğüş N. Brain Deaths and Donors in an Education and Research Hospital. Transplant Proc. 2019 Jul 31. pii: S0041-1345(18)31741-X. doi: 10.1016/j.transproceed.2019.01.164. [Epub ahead of print] PubMed PMID: 31377064.
2)
Esser G, Kolbrink B, Borzikowsky C, Kunzendorf U, Feldkamp T, Schulte K. Evaluation of underidentification of potential organ donors in German hospitals. PLoS One. 2020 Nov 19;15(11):e0242724. doi: 10.1371/journal.pone.0242724. PMID: 33211776.
3)
Smith M, Dominguez-Gil B, Greer DM, Manara AR, Souter MJ. Organ donation after circulatory death: current status and future potential. Intensive Care Med. 2019 Feb 6. doi: 10.1007/s00134-019-05533-0. [Epub ahead of print] Review. PubMed PMID: 30725134.