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Potential options to expand the intestinal donor pool: A comprehensive review
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Abstract

Purpose of reviewIntestinal donation is currently restricted to 'perfect' donors, as the intestine is extremely vulnerable to ischemia. With generally deteriorating donor quality and increasing indications for intestinal transplantation (ITx), the potential to safely increase the donor pool should be evaluated.Recent findingsIncreasing awareness on intestinal donation (often forgotten) and cautiously broadening the strict donor criteria (increasing age, resuscitation time and ICU stay) could expand the potential donor pool. Donors after circulatory death (DCD) have so far not been considered for ITx, due to the particularly detrimental effect of warm ischemia on the intestine. However, normothermic regional perfusion might be a well tolerated strategy to render the use of DCD intestinal grafts feasible. Furthermore, machine perfusion is under continuous development and might improve preservation of the intestine and potentially offer a platform to modulate the intestinal graft. Lastly, living donation currently represents only a minority of all ITxs performed worldwide. Various studies and registry analysis show that it can be performed safely for the donor and successfully in the recipient.SummarySeveral potential strategies are available to expand the current intestinal donor pool. Most of them require further investigation or technical developments before they can be implemented in the clinical routine. © 2022 Lippincott Williams and Wilkins. All rights reserved.

Author Keywords

intestinal transplantation; living donation; machine perfusion; normothermic regional perfusion; organ donation

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