

**Name of Journal:** *World Journal of Transplantation*

**Manuscript NO:** 57640

**Manuscript Type:** MINIREVIEWS

### Complications during multiorgan retrieval and pancreas preservation

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#### Abstract

In pancreas transplantation, complications can arise at each step of the process, from the initial selection of donors and recipients through the surgical technique itself and the post-operative period, when lifelong immunosuppression is required. In the early steps, careful retrieval and preservation of the pancreas are crucial for the viability of the organ and ultimate success of the transplant. The pancreas is a low-flow gland, making it highly sensitive to transplantation conditions and presenting risk of pancreatitis due to periods of ischemia. The two groups of donors - after brain death (DBD) or after cardiac arrest (DCD) - require different strategies of retrieval and preservation to avoid or reduce the risk of complications developing during and after the transplantation. For DBD donor transplantation, multiorgan retrieval and cold preservation is the conventional technique. Asystole donor (DCD) transplantation, in contrast, can benefit from the newest technologies, such as hypothermic and especially

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**Pancreas preservation** for **pancreas** transplantation. The two main methods used for experimental and clinical organ **preservation** are static cold storage, which we will simply refer to as cold storage, and machine perfusion [10–20,21•,22•,23–34,35•,36,37•,38–44].The hypothermic pulsatile machine perfusion technique originally developed by Carrel and Lindbergh in 1935 [45–47] has ...

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INTRODUCTION. Due to the increasing number of liver and **pancreas** grafts used for clinical transplantation, the combined harvesting of both these organs has become a common surgical practice (1-6).The liver and the **pancreas** own a very related vascular anatomy that has to be shared at the time of their combined **retrieval** (1-7).Besides that, the procurement of each organ requires quite different ...

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However, with deviations in **preservation** methods, the kidney can be exposed to additional warm ischaemia time. This is particularly important **during multiorgan retrieval**, where liver and **pancreas** will be benched first, rewarming the donor kidneys unless properly cooled. The same applies in vascular reconstruction in the donor kidney.

Author: E. van Straalen, R. C. Minnee    Publish Year: 2020

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The success of organ transplantation can be attributed to many factors, but ultimately depends upon **retrieval** and **preservation** techniques to maintain the quality of an organ. Thoracic and abdominal organs from deceased donors are retrieved **during a multi-organ** procedure.

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Ensuring that **pancreas retrieval** is performed by an experienced **pancreatic** transplant surgeon can significantly minimize such **retrieval-related complications** and risks. **Pancreatic** damage **during retrieval** is not uncommon, and may deem the organ unusable certainly for whole organ transplant.

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