

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 79408

Title: Anatomical basis for pancreas transplantation via isolated splenic artery perfusion:
A literature review

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06290122

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Russia

Manuscript submission date: 2022-08-19

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-08-22 11:32

Reviewer performed review: 2022-09-03 03:11

Review time: 11 Days and 15 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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SPECIFIC COMMENTS TO AUTHORS

1.The authors described the variation of arterial vessels for pancreas transplantation. The splenic artery has a high percentage of consistency, which is important and useful for the pancreatic transplantation, enhancing the operation success rate. 2.However, in the figure legends, you should present more details, so that the clinicians can clearly identify the possible variation of the arteries supplying to different parts of the pancreas.

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Peer-review model: Single blind

Reviewer's code: 02440467

Position: Editorial Board

Academic degree: MD

Professional title: Academic Research, Adjunct Professor, Doctor

Reviewer's Country/Territory: Italy

Author's Country/Territory: Russia

Manuscript submission date: 2022-08-19

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-09-11 11:05

Reviewer performed review: 2022-09-11 12:29

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
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SPECIFIC COMMENTS TO AUTHORS

Anatomical assessment of intra-pancreatic blood flow has been fully studied. Pancreas transplantation with isolated splenic artery blood supply has already been reported by the same group of Pancreas transplantation Dpt. in Moscow in six patients (Alexey V. Pinchuk and Ilya Dymiriev et al. Asian Journal of Surgery, 2020). The possibility to perform a pancreas transplantation from an anatomical point of view via a unique blood supply is out of question. However, the risk/benefit ratio for such a procedure is unbalanced due to the challenging nature of the surgical procedure used, which depends on a variety of variables where anatomy is only one variable. During pancreas transplantation, hemodynamic conditions can vary significantly, resulting in a high risk of choosing a single blood supply due to anatomical variability and hemodynamic variability. The lack of adequate autonomic response in diabetic patients to hypovolemia can result in unexpected functional dysregulation of the opening of intrapancreatic vascular anastomoses. In prolonged hypotension, intrapancreatic anastomoses for maximal vascularization of the duodenum can be impaired. For these considerations, the most reliable blood supply for a pancreas transplantation is considered the dual supply via the SMA and SA arteries. It would be unwise to propose one blood supply via the SA for pancreas transplantations, which have the highest complication rate. The isolated splenic artery blood supply can be proposed as a rescue procedure in very rare conditions where the mesenteric artery stump or the inferior pancreaticoduodenal artery have been allocated to the liver or intestine or damaged during abdominal multi-organ procurement (multiorgan procurement of liver, pancreas and intestine). The paper seems an anatomical review of several papers from different anatomical

studies and it does not seem to have a real clear clinical relevance for readers of the World Journal of Gastroenterology; therefore, it would be better suited for an anatomical journal.