Reviewer’s report

Title: A comparative study on the efficacy of a retrograde perfusion technique and an antegrade perfusion technique for donor kidney recovery in transplantation in pigs

Version: 0 Date: 27 Sep 2016

Reviewer: Lluís Peri

Reviewer's report:

In this article, the authors describe their experience using retrograde perfusion of kidneys for experimental transplantation and a comparison with the conventional antegrade perfusion. The experiments are adequately performed and described, but some changes should be made on the text before accepting it for publication:

RESULTS: data on ischemia times are missing and should be included.

DISCUSSION:

- "From an anatomical point of view, RP is clearly a more practical way to perfuse kidneys." This is not true. Perfusing a kidney in a retrograde fashion is as difficult the antegrade perfusion, but the perfusion must be interrupted.

- I think some more comment on the usefulness of RP should be included. The authors fairly state that some kidneys cannot be perfused antegrade because of mechanical reasons. If these kidneys cannot be perfused, will they be useful for transplantation?

CONCLUSION:

"Retrograde perfusion is an efficient kidney perfusion method for organ recovery from cadaveric donors." This conclusion can not be obtained from this study. The experiments you have conducted are much more similar to a living donor than a cadaver. The grafts have not been submitted to a long ischemia times as would be in a conventional cadaveric donor. A softer conclusion should be stated.

"Retrograde perfusion could potentially replace AP as a clinical perfusion method." This conclusion is not obtained from the study. Although retrograde perfusion seems tolavage kidneys adequately, this technique does not have enough evidence to replace the gold-standard method, not even "potentially".
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

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I am able to assess the statistics

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