Reviewer’s report

Title: The Reuse of Cardiac Organs in Transplantation: An Ethical Analysis

Version: 1 Date: 27 Jun 2018

Reviewer: Tobias Bauer

Reviewer's report:

An interesting article inquiring into the ethical permissibility of the reuse of a transplanted heart. From the perspective of consent to the reuse given or withheld by the first donor (FD) and the first recipient / second donor (FR/SD) respectively, the authors start by constructing four possible scenarios (chapter 3.1): (1) both FD and FR/SD consent, (2) FD consents, FR/SD does not consent, (3) FD does not consent, FR/SD consents, (4) neither FD nor FR/SD consent. They then discuss a variety of approaches and concepts, arguing for each scenario in favor of (chapter 3.2) and against (chapter 3.3) the ethical permissibility of the reuse of a transplanted heart. Finally (chapter 3.4), the authors argue in favor of the ethical permissibility of organ reuse by critically reviewing the counter-arguments presented previously.

The approaches presented and the ethical assessment of the permissibility of organ reuse elaborated on by the authors seem to constitute an original contribution in the field of transplantation ethics, which will certainly stimulate further inquiries into this topic. The article, therefore, deserves to be considered for publication.

However, in the humble opinion of the reviewer, the arguments brought forward to argue for the impermissibility of organ reuse in case both FD and FR/SD consent (chapter 3.3, pattern 1) demand further revision by the authors in two respects.
First, as was already partially pointed out in the review on the first draft of this article, the presumed possibility of a lack of "social consensus" and the negative perception of the reuse of organs as an act which evokes "disgust" leaves a rather speculative impression. Therefore, the citation of relevant data or literature (if available) to underpin these assumptions, or - for example - a demonstration of why problems of "social consensus" and negative perception of "normal" organ transplantations are amplified in the case of the reuse of transplanted organs, would certainly make this argument more plausible. (This critique also applies to the issues presented regarding identity.) Second, the ethical relevance of the possibility that was postulated regarding a lack of social consensus and a negative, "disgust"-evoking perception of organ reuse still seems vague. Obviously, these factors must be taken into account in a discussion on the policy-level regarding the problem of organ reuse. Their relevance to the ethical evaluation of this problem, however, seems to require some sort of justification.

As "disgust toward organ recycling" is one of the arguments the authors finally (chapter 3.4) attempt to refute in order to argue for the permissibility of organ reuse, a strengthening of this argument's initial presentation (in chapter 3.3) would be of further benefit to the persuasiveness of the article.

**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.
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