Reviewer’s report

Title: Interpositional Substitution of Free Vas Deferens Segment Autografts in Rat: Feasibility and Potential Implications

Version: 2 Date: 17 April 2014

Reviewer: Hooman Sadri-Ardekani

Reviewer’s report:

In this manuscript the authors investigated the feasibility of crossover vasovasostomy in a rat model. However crossover vasovasostomy or vasoepididymostomy has been suggested and performed for selected cases in clinical application in human, there is not sufficient data on the post operational quality of grafts. This is an interesting research which shows the post operational quality of the grafts in details and its correlation with fertility outcome in an animal model. This manuscript is acceptable for publication after addressing the following comments.

Major Compulsory Revisions:
This is a well-designed research and well-written manuscript. There is no major revision needs to be considered.

Minor Essential Revisions:
1. Page 3 lines 74-76: please add appropriate reference(s) which supports the statement of “…few attempts have been made to use vas autografts in experimental or clinical situations”.
2. Please add a subdivision of statistic to the Methods section related to the results in table 1.
3. Please describe the definition of “viable graft” in Method section. It is not clear in the results (Page 7 line 187) when you called the grafts viable.

Discretionary Revisions
It is recommended to add a figure to show the experimental design and different study groups (Control, cross graft-straight polarity and cross graft-reversed polarity). To decrease the total number of figures, current figures can be pooled as different panels of unit figure(s).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.