Reviewer’s report

Title: Measuring the Palpable Pulsatility Length as a Physical Examination Test in Defining the Severity of Inflow Stenosis for Hemodialysis Fistulas

Version: 0 Date: 11 Jul 2019

Reviewer: Anthony M. Valeri

Reviewer's report:

This is an excellent and thorough analysis of your work and very interesting.

Under Definitions, The vascular access pump (aPump), you state "It is not necessary for the whole length of an AVF to be capable of providing a high volumetric flow..." My understanding is that unless there are significant draining collaterals, then the volumetric flow must be constant along the entire length of the AVF proximal to any draining collaterals. Please comment

You should state, though it is obvious from your results, that this method will only work for a pure/isolated inflow stenosis.

Do you have clearance data (URR or spKt/V) before and after intervention on these cases? This would be interesting as it provides additional data on the clinical significance (in the absence of blood flow limitation) of the inflow stenoses that you identified.

Comment on how long it took for the observers to be trained on measuring/recording the PPL consistently.

Please confirm that you have included your review in the ‘Comments to Author’ box?

As a minimum standard, please include a few sentences that outline what you think are the authors’ hypothesis/objectives, their main results, and the conclusions drawn. Your report should constructively instruct authors on how they can strengthen their paper to the point where it may be acceptable for publication, or provide detailed reasons as to why the manuscript does not fulfill our criteria for consideration. Please supply appropriate evidence using examples from the manuscript to substantiate your comments. Please break your comments into two bulleted or numbered sections: major and minor comments.

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Are the methods appropriate and well described to allow independent reproduction of experiments?
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Yes

Does the work include the necessary controls?
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Yes

Are you able to assess the statistics?
- Are the statistical test(s) used in this study appropriate and well described?
- Is the exact sample size (n) reported for each experimental group/condition (as a number, not a range)?
- Are the description of any error bars and probability values appropriate?
- Are all error bars defined in the corresponding figure legends?
- Has a sample size calculation been included, or a description and rationale about how sample sizes were chosen?

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I have been able to assess all of the statistics in this manuscript (please refer to checklist above)

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Yes

Quality of written English
Please indicate the quality of language in the manuscript:

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Yes: e-mail updates: This provides dialysis center with a more objective measure in the clinic to detect significant inflow AVF stenoses.
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