Reviewer's report

Title: Does the principle of minimum work apply at the carotid bifurcation: a retrospective cohort study.

Version: 3 Date: 5 July 2011

Reviewer: Stefan Klein

Reviewer's report:

I thank the authors for their clear response to my previous comments. Based on the new results, I have some additional questions:

- Major Compulsory Revisions

  none

- Discretionary Revisions

  1) The results of the nonlinear regression methods seem not entirely consistent with those of the root-finding method. The median values of n from figure 3 (based on the root-finding method) are between 1.5 and 1.6, while the regression methods (table2) return n=1.3 approximately, with confidence intervals of about [1.2, 1.45]. The difference is not large, not sure if it significant, and it does not change the conclusion of the paper, but it would be interesting to find out where this difference comes from (some outliers that have a high impact on the regression result perhaps?). What also wonders me: the fit in figure 2 does not seem very well. There are many more points below the line y=x. Is there an explanation for this?

- Minor Essential Revisions

  2) Section Results, "are summarised Table 1" -> "are summarised in Table 1"

  3) Caption figure 2: please mention the value of n (≈1.32) in the caption, for convenience.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests