Reviewer's report

Title: Microvascular changes in children and adolescents with type 1 diabetes detected by nailfold capillaroscopy, laser Doppler flowmetry, retinal vessel analysis and 24-hr ambulatory blood pressure monitoring: A pilot study.

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Reviewer: Albert Selva-O'Callaghan

Reviewer's report:

This is an interesting and well written article addressed to explore the role of nailfold capillaroscopy, laser Doppler flowmetry and retinal vessel analysis for the detection of microvascular damage in type I diabetes.

Some issues are necessary to be corrected prior to publication, and some questions to be answered, mainly from the methodological point of view

1. Authors need to define the different terms used in the description of capillaroscopy findings, such as
   Avascular areas:
   Nailfold microhemorrhages:
   Microaneurisms: (the reviewer would like to see a classical image of microaneurims)

2. What about other classical capillaroscopy findings such as bushy, tortuous, meandering and branching capillaries, capillaries width, megacapillaries, or capillary disorganization…, do the authors explore them? I suggest referring to the following article [Feasibility of Different Capillaroscopic Measures for Identifying Nailfold Microvascular Alterations. Semin Arthritis Rheum 38:289-295]

3. Why the authors explore only 4 fingers and no 8 fingers, previous studies disclosed that explore 8 fingers was a good approach. In any case, it should be explained in the method section.

4. Authors stated in the method section that explore the capillary density, it means the mean number of capillary per patient, but results of this analysis is lacking.

5. Authors stated that they used a panoramic video, but which was the magnification (x 200, x 250…?)

The reviewer suggests that the authors follow the STROBE Statement (Strengthening the reporting of observational studies in epidemiology) and stated this in the method section

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