Reviewer’s report

Title: Doppler-guided Transanal Hemorrhoidal Dearterilization Versus Conventional Hemorrhoidectomy for Treatment of Hemorrhoids - Early and Long-term Postoperative Results

Version: 0 Date: 31 Dec 2017

Reviewer: Sameh Emile

Reviewer's report:

Comments to the authors

The authors present their experience with conventional hemorrhoidectomy and THD in treatment of hemorrhoidal disease. The study is promising and contains interesting data, however several issues were identified during my review which need to be addressed by the authors.

Methods

* It is unclear to me whether this study was a prospective one or a retrospective analysis of prospectively collected data which can change the level of evidence of the study substantially. I suggest stating the study design clearly at the start of the methods section.

* If this was a prospective, comparative study between conventional hemorrhoidectomy and THD, was it a randomized or non-randomized study? If it was randomized then it lacks vital information regarding the methods of randomization and blinding, if any. If it was not non-randomized then the authors should describe how each procedure (CH & THD) was selected for each patient.

* It appears that the CH group included different techniques, employing different instruments in performing excision of hemorrhoids, this might lead to significant heterogeneity in the outcome of different patients in the same group since they were not operated on uniformly.

* Please add a section to illustrate the operative steps of each technique used in the study.

* How was the sample size of the study reached? I suggest doing a power analysis to reveal the power of the study in detecting significant differences between the two groups.

* What were the primary and secondary outcomes of the study? And at what time points were these assessed?
* Please add a statement about obtaining informed consents from the patients prior to each procedure.

* What were the inclusion/exclusion criteria of the study? What grades of hemorrhoids were included and did the authors exclude patients with coexisting anorectal conditions such as anal fissure or fistula?

Results

* The hospital stay in each group (5.1 Vs 3.3 days) seems very long, hemorrhoidectomy is considered a simple day-case surgery, can the authors explain this prolonged hospitalization time?

* What was the mean or median duration of follow-up in each group and how many patients were available for assessment at the end of follow-up?

* Regarding recurrence of hemorrhoidal disease, the authors present data on recurrence requiring additional surgery, what about recurrence that did not require further surgery? Moreover, please add the p value of comparing the two groups in regards recurrence.

* The authors state in the title that the study investigated the long term outcome of each procedure, however no mention of long term complications such as anal stenosis or incontinence was made, please add data on long-term sequel of each procedure.

* Table 1, please remove the p value of the first row comparing the number of patients in each group.

* Table 1, Please report the mean age of all patients in each group instead of the mean age of male and female separately.

* Table 2, please add the percentage of each complication in each group. Also add the p value of comparing the two groups regarding each complication and the total complications.

* Table 3, please add the standard deviation next to the mean in each group.
Discussion

The authors need to discuss their own results in light of the literature, currently the discussion is merely a review of the literature with brief preview of the findings of the study in the last two paragraphs.

Other comments

* The manuscript needs linguistic revision by a native speaker as several grammatical and structural mistakes exist.

* There are several reports comparing CH and THD as the authors acknowledged, however what characterizes the present study is reporting long-term outcomes, mainly recurrence. Therefore, I recommend focusing on the long term results in both the results and discussion sections which would markedly strengthen the manuscript.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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