Reviewer's report

Title: Ureteric Stent Versus Percutaneous Nephrostomy for Acute Ureteral Obstruction - Clinical Outcome and Quality of Life: A Bi-Center Prospective Study

Version: 0 Date: 29 Nov 2018

Reviewer: Kristina Penniston

Reviewer's report:

This is a well-written manuscript aiming to assess quality of life in patients undergoing 1 of 2 different drainage systems while awaiting stone removal surgery. The literature search is incomplete (see below). There are also potential issues related to patient selection, patient data, and the questionnaires that were used (see below).

1. INTRODUCTION, p. 3: In your background, you cite only 2 studies that incorporated QOL questionnaires about drainage methods (later you refer to another, reference #11 - but this should be included in your background). In fact, there are at least 5 others published in English language from 2007 to 2017 (4 of which involve urolithiasis) that are required for a more comprehensive and balanced literature review. All of these were obtained by a search of PubMed using the search term "quality of life nephrostomy tube." One additional publication was revealed by replacing "nephrostomy tube" with "double j stent." While not all of these compare neph tubes to stents in a head-to-head comparison, the overall literature in this area is small enough that they should still be cited.

2. MATERIALS & METHODS, p. 4: Were only 75 patients asked to participate? Or were there additional patients asked to participate who declined? Over a 2 year period, it seems there might be more than a total of 75 patients reporting to the ER with an obstructing ureteral stone, especially with 2 centers involved. If >75 patients were invited, then some assessment of those who declined is required. At a minimum, this might include gender and age. This is important as it would confirm (or refute) that your 75 patients were representative of all patients who reported to the ER with obstructing ureteral stones and goes to the generalizability of your findings.

3. MATERIALS & METHODS, p. 4: Can you describe how surgeons decided whether to place a DJS or a PCN? "Surgeon's discretion" is too ambiguous. Perhaps there is some thought process or protocol you could explain.
4. MATERIALS & METHODS, p. 5: Is your version of the "tube symptoms questionnaire" validated? or have you previously published anything using this questionnaire? If not, then this should be clearly stated as such. Also, should state whether lower QOL is associated with a higher or lower score. I can glean this by looking at the questionnaire, but your methods should state this independently. Finally, you should note whether the questionnaire was completely investigator-designed or whether it included patient input to ensure that the appropriate items - i.e., things patients care most about - were included.

5. MATERIALS & METHODS, p. 5: The first QOL assessment (time 0) was done "shortly after the drainage procedure" (from page 7, line 164). Was this the same time/day for all patients. If so, then state the day after initiating drainage this occurred. If not, then include a row in Table 1 indicating the mean/median post-drainage day this was done by each group. This is important as patients may be affected differently depending on the number of days they have endured drainage "prior to definitive treatment." Regarding time 1, was this time point the same for all patients, i.e., was it immediately prior to (same day) as their procedure? or did the time point differ between patients and/or groups?

6. RESULTS, p. 6: To enhance readability, I suggest consistently using only the terms "DJS" and "PCN" to refer to your groups throughout the manuscript. This is as an alternative to your reference to these as groups A and B, respectively.

7. RESULTS, p. 6: It is usually not necessary to repeat results reported in a table. You have repeated some demographic and other data that are clearly shown in Table 1.

8. RESULTS, p. 6: The use of the VAS is not noted in your methods. Was it administered verbally? or was it a paper-and-pencil response? And on what day post-drainage was the VAS administered?

9. TABLE 1: Patients' prior experiences with stones and/or drainage may influence their reported QOL. Recommend including the percentage of one-time vs. recurrent stone formers in the table and assessing whether the effects of drainage on their QOL differed. Would also recommend including the percentage of those who have had prior drainage and comparing QOL between those who have and have not. This would inform you as to whether patients' QOL is influenced by prior experiences and/or expectations.
10. DISCUSSION, p. 11: After reviewing the additional publications on this topic, your discussion should be revised to reflect upon your results in the context of these other studies.

11. DISCUSSION, p. 12, line 285: I assume you mean "thorough" rather than "throughout."

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.

Please note that we may not be able to use your review if no comments are provided.

Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included as text in the ‘Comments to Author’ box.

Yes

Are the methods appropriate and well described to allow independent reproduction of experiments?
Please state in the ‘Comments to Authors' box below what you think are the strengths and weaknesses of the methods (study design, data collection, and data analysis), and what is required, if anything, to improve the quality of reporting

Yes

Does the work include the necessary controls?
If not, please explain in the ‘Comments to Author’ box below.

NA

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?
Please can you confirm which of the following statements apply to your statistical assessment of the manuscript (Please include details of what the authors need to address in the ‘Comments to Author’ box):

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

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in the ‘Comments to Author’ box below.

Yes

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

Acceptable

**Should the manuscript be highlighted for promotional activity?**
Articles that are deemed of interest to a broad audience can be promoted in a variety of ways. This could be through email updates, postings on the BioMed Central homepage, social media, blogs and/or press releases. Please indicate in the text box below whether you think this manuscript should be considered for promotional activity, indicating your reasons why (e.g. what is the most newsworthy aspect of the research).

No

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal