

Outcome of tubeless percutaneous nephrolithotomy in elder patients: A single-center experience from a developing country

Nadeem Iqbal, Sajid Iqbal, Aisha Hasan, Aimen Iqbal, Keron A.A. Blair, Dan M.J. Milstein, Saeed Akhter

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Handling editor:

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1st Editorial decision
30-Aug-2021

Ref.: Ms. No. JCTRes-D-21-00061

Comparison between Tubed and Tubeless PCNL in elder patients
Journal of Clinical and Translational Research

Dear Dr Iqbal,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below and attached to this email.

Please ensure that the text in the revision conforms to academic English standards, as has been stipulated in the author guidelines.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Also, please ensure that

the track changes function is switched on when implementing the revisions.
This enables the reviewers to rapidly verify all changes made.

Your revision is due by Sep 29, 2021.

To submit a revision, go to <https://www.editorialmanager.com/jctres/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #1:

You excluded positive urine culture patient from the study. Can you elaborate on that? Was it every patient with a single positive urine culture, or complicated patients with persistent cultures, or unique difficult to treat bacteria? Also, in the following paragraph you mentioned antibiotic treatment to patient with positive urine culture, are you talking about the ones you excluded, or are those patients you did include? Please explain the whole protocol with cultures and antibiotics

Materials and methods, paragraph two, line 35: you repeat yourself twice explaining all the pre-operative work up, please rework the paragraph.

Materials and methods, last paragraph two, line 33: "perioperative" and not "per operative"

Statistical analysis, last sentence: a P value statistically "significant"

You mentioned follow up for stone free status with US and XRAY, if any stones are suspected did you perform a CT then to confirm size and status?
Because 73.6% stone free rate of less than 4 mm is too low, can you also elaborate on this in your discussion and compare to the literature?

Regarding complications:

* I just want to confirm your statement, because I find it hard to believe you had 121 cases of elderly PCNL, with absolutely no one requiring angio embolization?!

* Also, it is also strange to have only 3 cases of fever in 121 patients, I would expect more instances of sepsis, not to mention fever. Please confirm those results.

* Please discuss why hospital stay was 3-3.3 days, when your reported complication rate is so low?

Can you also add, either in your introduction or in the discussion, an explanation to why it is important to consider this in the geriatric population, and why this population is important?

The discussion is almost entirely about findings in other studies. You should discuss more your findings and then compare those to other findings in the literature. The way it is now reads more like a review of literature.

I am not sure I agree with your conclusion based on your results. I agree with a lot of what the literature found regarding tubeless PCNL. But in your study, you did not show any statistically significant differences between the groups, other than maybe analgesia. Which makes it difficult to understand why should one even attempt the tubeless PCNL

Reviewer #2: An interesting study question, however, it has to be much improved. The language to start off has to be significantly improved. Citations are needed throughout the text where affirmations are made.

The introduction more than historic has to be short, concise and to the point. MM shortened to data collection and statistical analysis. With a sentence is enough to say whether it was prone or supine. Saving up on the surgical technique paragraph. In other words not needed.

I would argue against that anything less than 4mm is stone free. I would advise caution using the term.

The results need to be presented more elegantly and interestingly. What about need for more DJ stent insertion in the tubeless group? Ancillary procedures? Did all get a DJ and just one group no nephrostomy.

In general results need to be pepped up.

Again avoid recounting the history and past of PCNL in the discussion. Focus on the most important results and gauge them with what there is in the literature.

Much work needs to be done still.

Reviewer #3: First of all congratulations to the authors for their study. The authors investigated to compare standard PCNL and tubeless PCNL.

- However the following points should be explained.--

-English needs revision. Native speaker should be checked the article.

-Title of abstract should be rearranged. Title is very ordinary.

-Which PCNL access technique was performed for Access?

-Inclusion and exclusion criteria should be added

-No information was given about how to control non-opaque stones in both groups. The study were not included non-opaque stones. This sentence added exclusion criteria.

-Mean operation time was very different and statistical analysis is not convincing.

-How was fluoroscopy time both groups.

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

Authors' response

Reviewer comments and queries:-

Ref.: Ms. No. JCTRes-D-21-00061
Journal of Clinical and Translational Research

Title:- Comparison between Tubed and Tubeless PCNL in elder patients.

Dear team,

We are thankful to the reviewers for guiding us to further polish our manuscript.
Worthy reviewers have asked certain points which are answered point wise below,

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Reviewer #1:

1. You excluded positive urine culture patient from the study. Can you elaborate on that? Was it every patient with a single positive urine culture, or complicated patients with persistent cultures, or unique difficult to treat bacteria? Also, in the following paragraph you mentioned antibiotic treatment to patient with positive urine culture, are you talking about the ones you excluded, or are those patients you did include? Please explain the whole protocol with cultures and antibiotics.

1. Dear editor, It is a valid query by honorable reviewer. We excluded patients who had active urinary tract infection. However in few cases, even if there was a single episode of active infection it was treated and a patient was included in study only once the repeat urine culture was negative. Hence we excluded patients who had persistent or complicated patients with complicated patients with persistent cultures, or unique difficult to treat bacteria. In a nutshell, we did include only patients who had no active infection (in other words negative urine culture test) at the time of surgery.

It is supported by literature as well, for example, in one study they had a protocol of that All patients had either sterile urine cultures or they were treated according to the antibiotic sensitivity tests before undergoing PCNL.

Ref: Ozturk H. Tubeless versus standard PCNL in geriatric population. Actas Urol Esp. 2015 Oct;39(8):494-501. English, Spanish. doi: 10.1016/j.acuro.2015.02.010.

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2. Materials and methods, paragraph two, line 35: you repeat yourself twice explaining all the pre-operative work up, please rework the paragraph.

2. Dear editor, we have rewritten the paragraph as per reviewers advice. We have removed the repetition in paragraph. (highlighted yellow).

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3. Materials and methods, last paragraph two, line 33: "perioperative" and not "per operative".

3. Dear editor, we have correctly written the word as per reviewers advice. (highlighted yellow).

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4. Statistical analysis, last sentence: a P value statistically "significant"

4. Dear team, we have re written this sentence as advised by the respected reviewers as below, A p value of <0.05 was judged as statistically significant value.

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5. You mentioned follow up for stone free status with US and XRAY, if any stones are suspected did you perform a CT then to confirm size and status?

Because 73.6% stone free rate of less than 4 mm is too low, can you also elaborate on this in your discussion and compare to the literature?

5. Dear editor, honorable reviewer had a valid query.

There are different studies with different cut of residual stone fragment size to define stone clearance. We had a cut off value of less than 4 mm residuals to be stone free that being the reason it was 73.6%. For example, in one study by Ozturk et al. (ref 1), treatment success was defined as no residual stone fragment greater than 5 mm on postoperative computerized tomography plain or abdominal radiography, and no need for any further intervention. If we had taken the 5 mm cut off value our stone free rate would have reached above 90%.

Second point to note is that stone size in our study was larger as compared to other studies. For example, mean stone size was 3.5 cm in study by Lai Wh et al (ref2) and they achieved stone free rate of 78.3%. While we had mean stone size of 3.57 cm (bigger as compared to their size) in tubeless group. In yet another study by Ichaoui et al. with stone size matching our study their stone free rate reached 71% (ref3). Their results were considered good in the absence of residual lithiasis or less than 5 mm residual stones. So we kept a stricter cut off value for stone free rate. Still our stone free rates were relatively better than contemporary studies. In yet another study by Kuntz et al. (ref4), the overall stone-free rate was 52.5% (due to higher BMI subjects studied).

We did CT scan in post operative follow up in few patients, where there were symptoms on the operated side and there was hydronephrosis or multiple fragments stone suspicion on Xray or ultrasound KUB.

Ref 1: Ozturk H. Tubeless versus standard PCNL in geriatric population. Actas Urol Esp. 2015 Oct;39(8):494-501. English, Spanish. doi: 10.1016/j.acuro.2015.02.010.

Ref 2: Lai Wh, Yeong-Chin Jou , Ming-Chin Cheng, [Cheng-HuangShenChang-TeLinPi-CheChen](#), et al. Tubeless percutaneous nephrolithotomy: Experience of 1000 cases at a single institute. Urological Science. 2017;28;23-26.

Ref3: Ichaoui H, Samet A, Ben Hadjalouane H, Hermi A, Hedhli H, Bakir MA, Khiari R, Ghazzi S. Percutaneous Nephrolithotomy (PCNL): Standard Technique Versus Tubeless - 125 Procedures. Cureus. 2019;11(3):e4251. doi: 10.7759/cureus.4251.

Ref4: Kuntz NJ, Neisius A, Astroza GM, Tsivian M, Iqbal MW, Youssef R, Ferrandino MN, Preminger GM, Lipkin ME. Does body mass index impact the outcomes of tubeless percutaneous nephrolithotomy? BJU Int. 2014;114(3):404-11. doi: 10.1111/bju.12538.

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6. Regarding complications:

* I just want to confirm your statement, because I find it hard to believe you had 121 cases of elderly PCNL, with absolutely no one requiring angio embolization?!

6. Dear editor, Honorable reviewer asked regarding the need for angioembolisation. We had experienced surgeons in our hospital. And even in recent literature the rate of angioembolisation is less than 0.5%-1 %. In one study by Ozturk H et al. (ref1) there was no case of angioembolisation. In yet another study by Ichaoui H et al. including 125 patients there was no mention of need for angioembolisation (ref2). In another large study by Kuntz NJ et al. (ref3), there was not a single case of angioembolisation in 509 patients included in their study.

Ref 1: Ozturk H. Tubeless versus standard PCNL in geriatric population. Actas Urol Esp. 2015 Oct;39(8):494-501. English, Spanish. doi: 10.1016/j.acuro.2015.02.010.

Ref2: Ichaoui H, Samet A, Ben Hadjalouane H, Hermi A, Hedhli H, Bakir MA, Khiari R, Ghazzi S. Percutaneous Nephrolithotomy (PCNL): Standard Technique Versus Tubeless - 125 Procedures. Cureus. 2019;11(3):e4251. doi: 10.7759/cureus.4251.

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7. * Also, it is also strange to have only 3 cases of fever in 121 patients, I would expect more instances of sepsis, not to mention fever. Please confirm those results.

7. Dear editor, Honorable reviewer asked regarding the rates of sepsis in this study. He had a very valid query. We had stringent preoperative work up and included urine negative culture patients for surgery. In Sepsis, we had 4/70 (5.71%) in tubed group and 1/51 (1.96%) patients in tubeless group and as such overall cases of sepsis in this study were 5/121 patients (4.13%). In recent study by et al.(ref3) postoperative sepsis was recorded in 13 (1.3%) patients.

As far as only fever is concerned which is a different entity as compared to sepsis, we had lesser instances of fever but they were much similar to the recent literature. We used incentive spirometry in all patients and tried to achieve good pain control in order to mobilise patient early and keep the chest expansion and breathing maximum to avert any cause of atelectasis and respiratory tract infection, which may cause fever. Secondly, we used paracetamol regularly, therefore, instances of fever were lesser. All these steps resulted in lesser instances of fever in our study. Even in recent literature, rates of sepsis vary from 1-4%. For example in one recent study by Ichaoui et al. Fever was seen in 2 (3.9%) patients in the tubeless group of PCNL (ref1). In yet another study, by et al (ref2) fever was seen in 11 (4.1) patients, but it should be noted that they had higher BMI of patients that could have resulted in more pain and late mobility and respiratory tract infection all of which could have increased their chances of fever, supposedly.

Ref 1. Ichaoui H, Samet A, Ben Hadjalouane H, Hermi A, Hedhli H, Bakir MA, Khiari R, Ghazzi S. Percutaneous Nephrolithotomy (PCNL): Standard Technique Versus Tubeless - 125 Procedures. Cureus. 2019;11(3):e4251. doi: 10.7759/cureus.4251.

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Ref 3: W H Lai et al. Tubeless percutaneous nephrolithotomy: Experience of 1000 cases at a single institute. Urological Science. 2017;28;23-26.

8.* Please discuss why hospital stay was 3-3.3 days, when your reported complication rate is so low?

8. Dear editor, Honorable reviewer asked regarding the hospital stay. As many of the patients were on panel of insurance companies, so we cared for them relatively longer on the whole. Another point to be noted is that our hospital duration was counted from the time of admission to the hospital and not post operatively. We had to see the whole impact of hospitalisation duration right from start of admission in preop ward till the discharge day from

hospital ,as insurance panel also includes the day spent in preop period in inpatient ward. If we did not count the day before surgery then our hospital duration would have been 2 to 2.3 days which is still shorter as compared to recent studies done even in the young patients.

For example,in a study by Ichaoui et al.(ref1) Hospital stay was around 3.81 days. Which is quite longer as compared to our study. In another study by W H Lai et al. (ref2) hospital stay was 3.7 days (duration longer than in our study).

Ref 1. Ichaoui H, Samet A, Ben Hadjalouane H, Hermi A, Hedhli H, Bakir MA, Khiari R, Ghozzi S. Percutaneous Nephrolithotomy (PCNL): Standard Technique Versus Tubeless - 125 Procedures. Cureus. 2019;11(3):e4251. doi: 10.7759/cureus.4251.

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9. Can you also add, either in your introduction or in the discussion, an explanation to why it is important to consider this in the geriatric population, and why this population is important?

9. Dear editor, We have acted upon the advice of the respected reviewers.We have made the additions in the introduction section and have been highlighted.

In case of elderly age group patients, such kind of reports are shared by very few centers globally, however, vivid affirmation regarding usefulness of tubeless procedure is still sought for in the elderly groups. People who are elder, are frail and have comorbid making them more prone to develop intraoperative or post-operative complications. Therefore, PCNL in elder age may prove to be challenging at times (9-10).

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10. The discussion is almost entirely about findings in other studies. You should discuss more your findings and then compare those to other findings in the literature. The way it is now reads more like a review of literature.

10. Dear editor, We have acted upon the advice of the honorable reviewer.We have made the additions in the discussion section highlighted.

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11. I am not sure I agree with your conclusion based on your results. I agree with a lot of what the literature found regarding tubeless PCNL. But in your study, you did not show any statistically significant differences between the groups, other than maybe analgesia. Which makes it difficult to understand why should one even attempt the tubeless PCNL.

11. Dear editor ,it was a very pertinent query by the honorable reviewer. Tubeless PCNL is deemed to be advantageous, because of diminished postoperative pain and analgesia necessity, shorter hospitalization and lower cost in young patients, however, there is no clear evidence with reference to virtue of tubeless PCNL in the elderly age groups. This study will help in assessing feasibility of tubeless PCNL in the elderly patients. In literature much is explained regarding the young patients. However the recovery pattern and post operative outcomes have not been much described in literature especially regarding the tubeless PCNL. In this study we found that there was diminished pain in the tubeless group. Such decrease in pain can be of help in early mobilisation and less chances of hypertension and tachcardia which can be harmful for the cardiovascular dynamics in elder age patients. More studies are needed in future regarding tubeless PCNL in elder age patients as there is still paucity of explanantion in the current literature regarding the subject matter. The findings of this study can be a motive for other centers to share more better results in elder age post op care after PCNL. We had lesser number of complications as compared to the literature regarding the young age PCNL experinces. So it is not matter of what results we had , it is rather an impetus for other centers to share their experiences in third world country regarding PCNL outcomes in geriatric age group . We had first ever study from pakistan regarding tubless PCNL in old age. Such old age patients' tubeless PCNL studies are not published in past in developing countries to the best of of our knowledge. Eventhough, young tubeless PCNL experiences from developing countries have been validated in literature but it is not the case with tubeless PCNL in older age patients. In our study the hospital stay was not much different due to reason of our initial experiences in old age tubless PCNL. We were more careful regarding the patients stay. But, it is clear from our study that pain was reduced in tubeless PCNL. That will guide us to discharge such patients more early in future.

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Reviewer #2:

1. An **interesting study** question, however, it has to be much improved. The language to start off has be significantly improved

1. We are thankful for the encouraging comments by the honorable reviewer. It really gives us an extra energy and motivation to follow the journey of research. We have tried to revise the languaue content as adviswd by honorbale reviewers. We hope to receive more guidance from your team if any such need arise.

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2. Citations are needed throughout the text where affirmations are made.

2. We have folowed the advise of the honorbale reviewers.

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3. The introduction more than historic has to be short, concise and to the point. MM shortened to data collection and statistical analysis. With a sentence is enough to say whether it was prone or supine. Saving up on the surgical technique paragraph. In other words not needed.

3. Dear editor, We have followed the advice of honorable reviewers. We have shortened the material methods as advised. Similarly, we have made the introduction more concise as advised.

4. I would argue against that anything less than 4mm is stone free. I would advise caution using the term.

4. Dear editor, honorable reviewer had a valid query.

There are different studies with different cut of residual stone fragmentation size to define stone clearance. We had a cut off value of less than 4 mm residuals to be stone free that being the reason it was 73.6%. For example, in one study by Ozturk et al.(ref 1) , treatment success was defined as no residual stone fragment greater than 5 mm on postoperative computerized tomography plain or abdominal radiography, and no need for any further intervention. If we had taken the 5 mm cut off value our stone free rate would have reached above 90%.

Second point to note is that stone size in our study was larger as compared to other studies. For example, mean stone size was 3.5 cm in study by Lai Wh et al (ref2) and they achieved stone free rate of 78.3%. While we had mean stone size of 3.57cm (bigger as compared to their size) in tubeless group. In yet another study by Ichaoui Het al. with stone size matching our study their stone free rate reached 71% (ref3). Their results were considered good in the absence of residual lithiasis or less than 5 mm residual stones. So we kept a stricter cut off value for stone free rate. Still our stone free rates were relatively better than contemporary studies. In yet another study by Kuntz et al.(ref4), the overall stone-free rate was 52.5% (due to higher BMI subjects studied).

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5. The results need to be presented more elegantly and interestingly. What about need for more DJ stent insertion in the tubless group? Ancillary procedures? Did all get a DJ and just one group no nephrostomy.
In general results need to be pepped up.

5. Dear editor, Reviewer has asked a very pertinent query. Yes, We did insert Dj stents in all patients as per operative clearance can not be 100 % reassuring. As said by the reviewer, we put Dj stents in all patients, and nephrostomy tube was placed in tubed pcnl group 1. We have mentioned this in the results section as advised by the honorable reviewer.
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6. Again avoid recounting the history and past of PCNL in the discussion. Focus on the most important results and gauge them with what there is in the literature.
Much works needs to be done still.

6. Dear editor, We have acted according to the advice given by the respectable reviewers.
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Reviewer #3:

1. First of all congratulations to the authors for their study. The authors investigated to compare standart PCNL and tubeless PCNL.

1. Dear editor, We are much thankful for the encouraging comments by the honorable reviewer. It gives us the boost to work more meticulously in this journey of research.

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However the following points should be explained.--

2. English needs revision. Native speaker should be checked the article.

2. Dear editor, We have made the revisions of language as advised by the honorable reviewer.

3. Title of abstract should be rearranged. Title is very ordinary.

3. Dear editor, We have rearranged the title as advised by the respected reviewer.
“Outcomes of Tubeless PCNL in Elder Patients-Single Center Experience from a Developing Country.”

4. Which PCNL access technique was performed for Access?

4. Dear editor, We mostly performed the lower pole access by triangular technique (TT) mostly and in some cases by Tip of the eye of needle (EN) technique. Abdallah et al compared the TT and EN techniques using a biological model.¹ The mean fluoroscopic time was shorter when the EN technique was employed, but the techniques did not differ significantly in terms of either the number of punctures required or the total operative time.²

References:-

1. Li Y, Yang L, Xu P, Qian S, Wei W, Wang J, et al. One-shot versus gradual dilation technique for tract creation in percutaneous nephrolithotomy: a systematic review and meta-analysis. *Urolithiasis*. 2013;41(5):443–8. [[PubMed](#)] [[Google Scholar](#)]
2. Abdallah MM, Salem SM, Badreldin MR, Gamaleldin AA. The use of biological model in comparing the eye of the needle method with the triangulation technique for fluoroscopy guided percutaneous puncture: A randomized double crossed study. *Eur Urol Suppl*. 2011;10(2):67. [[Google Scholar](#)]

5. Inclusion and exclusion criteria should be added.

5. Dear editor, We have already added the inclusion and exclusion criteria in the materials and method section. We have highlighted it.

Subjects (age ≥ 60 years), who had renal stone size exceeding 2 cm and consequently underwent PCNL were incorporated in this study. While those who had shown bacterial growth in urine, compromised renal functions, open stone surgery on ipsilateral kidney in past, previous sessions of shock wave lithotripsy, patients who required more than two tracts, bleeding disorders were kept out of the final analysis.

6. No information was given about how to controlled non-opaque stones in both groups. The study were not included non-opaque stones. This sentences added exclusion criteria.

7. In case of non opaque stones, Post up follow up was done with ultrasound KUB to look for suspected residual stones and in presence of stones CT scan KUB was done to look for significant residual stones.

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7. Mean operation time was very different and statistical analysis is not convincing.

7. Dear editor, The difference was of 16 minutes and upon recheck it was found significant. We are thankful to the honorable reviewers for advising to correct this point here. We are much obliged to them for the precious guidance.

P value and statistical significance:

The two-tailed P value equals 0.0318

By conventional criteria, this difference is considered to be statistically significant.

We have added this correction to the table and highlighted it.

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8. How was fluoroscopy time both groups.

8. Dear editor, it was a nice query by the honorable reviewer. We did not include this in the study parameter as our aim was regarding the pain control, hospital stay and the costs.

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We would like to thank the honorable reviewers for their constructive guidance and encouraging comments.

Thanking you again.

Yours sincerely

Nadeem Iqbal

Corresponding author.

2nd Editorial decision
05-Dec-2021

Ref.: Ms. No. JCTRes-D-21-00061R1
Outcomes of Tubeless PCNL in Elder Patients-Single Center Experience from a Developing Country.
Journal of Clinical and Translational Research

Dear author(s),

Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

If you decide to revise the work, please itemize the reviewers' comments and provide a point-by-point response to every comment. An exemplary rebuttal letter can be found on at

<http://www.jctres.com/en/author-guidelines/> under "Manuscript preparation."

Also, please use the track changes function in the original document so that the reviewers can easily verify your responses.

Your revision is due by Jan 04, 2022.

To submit a revision, go to <https://www.editorialmanager.com/jctres/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely,

Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #1: Thank you for answering all questions and attempting to clarify all concerns. I think this is an improvement, but would require some more modifications.

In the abstract you mentioned you were looking into the "feasibility and trustability" of the procedure in the elderly. Since this is a retrospective study, I assume you already established it is at least "feasible", otherwise you would not offer it to your patient.

I think it is better to describe this as reviewing the results and outcomes in the elderly population.

Same this applies to the last sentence in the "relevance to patients" section.

All the point you discussed in regards to my questions:

- CT for stone size
- Stone free rate
- Length of stay

Need to be discussed in your discussion and explained, as readers will have the same questions.

Also, I have two major remarks:

1. Regarding the length of stay:

I personally cannot justify doing a tubeless PCNL if you are going to keep the patient in the hospital anyway for 2-3 days. The entire point of tubeless PCNL is the patient going home the same day, otherwise it is simply easier to leave a nephrostomy to be removed the next morning - and the patient goes home as "true tubeless" with no stent related symptoms after.

And this is a point you also need to mention in your discussion.

And if you think tubeless is still a good idea in patients staying in the hospital, then please present your justification as you discuss this matter.

2. Regarding stone free rate: many high-volume centers do not agree with what you presented.

I do agree some studies do show a stone free rate close to the 70% in standard "24-30F PCNL", but those are the ones taking the cut-off for stone free rate as low as 0 or 2 mm. with a 4 mm stone free rate many high-volume centers have a better stone free rate. So I would be careful with how I present it compared to the literature.

Regarding questions and answer 11 for reviewer 1:

Thank you for the explanation, and if those are your thoughts on the matter then your conclusion should be changed to reflect exactly what you said:

- Even though no major differences were seen in this study other than analgesia need. We believe this is an important study due to the potential it poses inetc

Also, regarding the conclusion, I would not say it has "inherent advantage" of lesser operative time. as this is a retrospective comparison, and inherently any complicated and longer case would usually not be tubeless. So this is misleading unless a prospective comparison is made.

Authors' response

Reviewer comments and queries:-

Ref: Ms. No. JCTRes-D-21-00061R1

Journal of Clinical and Translational Research.

Title:- Outcomes of Tubeless PCNL in Elder Patients-Single Center Experience from a Developing Country.

Dear team,

We are thankful to the reviewers for guiding us to further polish our manuscript. Worthy reviewers have asked certain points which are answered point wise below,

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1. Dear author(s), Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

1. Dear editor, We are really thankful to the encouraging comments that make us work more harder to further polish and continue the journey of research.

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Reviewer #1:

1. Thank you for answering all questions and attempting to clarify all concerns. I think this is an improvement, but would require some more modifications.

1. Dear editor, We are much grateful to the positive comments made by the worthy reviewer. We have made the modifications as suggested point wise.

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2. In the abstract you mentioned you were looking into the "feasibility and trustability" of the procedure in the elderly. Since this is a retrospective study, I assume you already established it is at least "feasible", otherwise you would not offer it to your patient.

I think it is better to describe this as reviewing the results and outcomes in the elderly population.

Same this applies to the last sentence in the "relevance to patients" section.

2. Dear editor, We agree with the worthy suggestion made by the reviewer that it is better to describe this as reviewing the results and outcomes in the elderly population.

We have made this suggested modification of the sentence as highlighted in the revised manuscript. We have acted on the suggestion in the last sentence in the "relevance to patients" section as well.

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3. All the point you discussed in regards to my questions:

- CT for stone size
- Stone free rate
- Length of stay

Need to be discussed in your discussion and explained, as readers will have the same questions.

3. Dear editor, It was a very nice suggestion by the respected reviewer. We have acted on the advice and have included the relevant lines in the discussion section. The changes have been highlighted in yellow color.

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Also, I have two major remarks:

4. Regarding the length of stay:

I personally cannot justify doing a tubeless PCNL if you are going to keep the patient in the hospital anyway for 2-3 days. The entire point of tubeless PCNL is the patient going home the same day, otherwise it is simply easier to leave a nephrostomy to be removed the next morning - and the patient goes home as "true tubeless" with no stent related symptoms after.

And this is a point you also need to mention in your discussion.

And if you think tubeless is still a good idea in patients staying in the hospital, then please present your justification as you discuss this matter.

4. Tubeless PCNL patients had lesser need for analgesia which means a quicker recovery in terms of gaining early mobility , lesser incidence of tachycardia and high blood pressure (that can also lead to cardiac events) associated with pain which is very important aspect in the context of elderly patients. Additionally, lesser incidence of pain leads to good respiratory function and lesser incidence of atelectasis and pneumonia. There is early recovery of gut peristalsis when the patient pain is less. In a nutshell, all these benefits related to lesser pain in tubeless PCNL patients have a potential of quicker recovery, reduced hospital stay and complication rates and resultant costs.

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5. Regarding stone free rate: many high-volume centers do not agree with what you presented. I do agree some studies do show a stone free rate close to the 70% in standard "24-30F PCNL", but those are the ones taking the cut-off for stone free rate as low as 0 or 2 mm. with a 4 mm stone free rate many high-volume centers have a better stone free rate. So I would be careful with how I present it compared to the literature.

5. Dear editor, We appreciate the worthy comments by the honorable reviewer. Stone free rate is affected by stone scores such GUYS stone score and S.T.O.N.E scores. Stone free rates decrease as the complexity of stone location and size of stone increases in the kidney. We had the first study so far in elderly based on GUYS stone scoring system where we had stratified the patients according to stone complexity. Secondly, We had simple location stones in half patients (GUYS score 1) where we had stone free rate of 86 % despite the relatively higher stone size in our study. While other half of the stones were complex difficult stones (GUYS score 2-4) where the stone free rate was reduced to 70%, 62 % and 37% respectively for GUYS scores 2, 3 and 4.

These complex stones (GUYS 2-4) affected the overall result , but still we maintain the overall stone free rate in this study reached almost 75% in tubeless PCNL despite the half of stones being of complex nature.

Guys stone score	Tubed (70)	Tubeless (51)	Overall Stone free rate
1	30/34	22/27	52/61 (86%)
2	14/21	11/15	25/36 (70%)
3	5/8	3/5	8/13 (62%)
4	2/7	2/4	4/11 (37%)

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6. Regarding questions and answer 11 for reviewer 1:

Thank you for the explanation, and if those are your thoughts on the matter then your conclusion should be changed to reflect exactly what you said:

- Even though no major differences were seen in this study other than analgesia need. We believe this is an important study due to the potential it poses inetc

6. Dear editor, We are thankful to the reviewer for appreciating the explanations given by us. We have acted on the worthy advice by the reviewer and have made the following modifications in the conclusion section accordingly.

Tubeless percutaneous nephrolithotomy can be safely undertaken in the carefully selected geriatric cases. It has inherent advantages of lesser operative time and reduced necessity for analgesia. However, mean hospital stay and costs were similar between tubed and tubeless groups. We believe this is an important study and the potential it poses in reducing the hospital stay due to less need for analgesia and so the resultant costs.

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7. Also, regarding the conclusion, I would not say it has "inherent advantage" of lesser operative time. as this is a retrospective comparison, and inherently any complicated and longer case would usually not be tubeless. So this is misleading unless a prospective comparison is made.

7. Worthy reviewer has given a good advice. We have made necessary modifications in the light of the advice.

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We would like to thank the honorable reviewers for their constructive guidance and encouraging comments.

A very happy new year to you all.

Have a happy and blessed life ahead.

Thanking you again.

Yours sincerely

Nadeem Iqbal

Corresponding author.

3rd Editorial decision

08-Jan-2022

Ref.: Ms. No. JCTRes-D-21-00061R2

Outcomes of Tubeless PCNL in Elder Patients-Single Center Experience from a

Developing Country.
Journal of Clinical and Translational Research

Dear author(s),

Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

If you decide to revise the work, please itemize the reviewers' comments and provide a point-by-point response to every comment. An exemplary rebuttal letter can be found on at <http://www.jctres.com/en/author-guidelines/> under "Manuscript preparation." Also, please use the track changes function in the original document so that the reviewers can easily verify your responses.

Your revision is due by Feb 07, 2022.

To submit a revision, go to <https://www.editorialmanager.com/jctres/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely,

Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research

Reviewers' comments:

Dear authors,

Thank you for resubmitting your work following the implementation of revisions as suggested by the reviewers.

I have studied the comments and their implementation, and am content with the overall result.

However, before we can proceed to publication the manuscript requires considerable proofreading as it is replete with grammar/spelling/syntax errors.

Please engage a native speaker, a third-party service, or JCTR staff (will incur a fee) to help you with the proofreading.

I kindly ask you not to take this requirement lightly as JCTR will not publish manuscripts that are linguistically subpar.

Kindest regards,

Michal Heger
Editor

4th Editorial decision
18-Feb-2022

Ref.: Ms. No. JCTRes-D-21-00061R3
Outcomes of Tubeless PCNL in Elder Patients-Single Center Experience from a
Developing Country.
Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the
Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly
review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research

Comments from the editors and reviewers: