OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://sites.kowsarpub.com/kowsar/knowledgebase/category/tree.html#opr.html

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Published in: Iranian Journal of Radiology: 16(4); e86417

Peer Review Report for "Therapeutic Effect of Bone-Filling Mesh Container in Treating Vertebral Metastases with Vertebral Body Posterior Marginal Damage"

Author(s): Zi-Kun Duan, Xin-Guo Kang, Jin-Feng Zou, Sheng-Li Ye, Chun-Jing He

Review Timeline:

Submit Date:	15 Nov 2018
Revised Date:	28 Jul 2019
Accepted Date:	31 Jul 2019

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (0) — 8 Jan 2019

Dear AE,
The authors described 72 vertebral bodies of thoracolumbar osteolytic metastases were treated with vertebroplasty. and The operation time of the two groups was recorded, and the visual score scale (VAS), Oswestry dysfunction index (ODI), intraoperative bone cement leakage, and complications were observed before operation and 1day, 1month, and 6 months after the operation. And in result, The application of a bone-filling mesh container for treating patients with thoracolumbar osseointegrated metastases can significantly reduce the leakage rate of bone cement and is similar to traditional PKP in pain relief and activity improvement
General comments:
this is not a new procedure but it is a relatively novel manuscript.
Thanks.

REFEREE: Reviewer | **Revision** (0) — 9 Jan 2019

Daer AE,

1- Please add in the abstract method and in paper which variable was assessed by VAS? It seems it is pain but should be mentioned clearly in the paper and abstract.
2- It seems ODI is a disability, not dysfunction.
3- Please delete: “There was no significant difference in operation time” [only P-value is sufficient] and mention P-values in exact number. (P>0.05 is insufficient, the exact number is preferable).
4- Please revise carefully the English writing of paper [for example One case occurred cement leakage in the BFMCS group should be: Cement leakage occurred in one case in the BFMCS group].
5- Please mention VAS an ODI in pre-procedure and 6 months only [in abstract results]. No need to mention all 4 data. [for example, VAS dropped from 7.50±0.95 in pre-operation to 1.20±0.41 in 6 months follow up in PKP group] In addition, please mention P-values for reduction of VAS and DOI in successive times in abstract. In addition, please mention P-Value for comparison of leakage between two groups.
6- Please add the objective part to paper according to journal format.
7- Please write this sentence as the first sentence of method before inclusion an exclusion criteria: “A total of 40 patients with thoracolumbar osteolytic metastases (72 vertebral bodies) who underwent vertebroplasty from October 2016 to January 2018 were enrolled, including 47 thoracic vertebrae and 25 lumbar vertebrae.”
8- Please mention the method for differentiating osteoporotic fracture from metastatic osteolytic fractures.
9- The authors mentioned: “and the pathological examination confirmed the metastatic tumor” as inclusion criteria. It is unknown if the authors mean the proving the source tumor by pathology or vertebral metastasis was proved by histology? Did the authors take a biopsy from all vertebral lesions before the procedure?
10- One important point is the method of assigning the patients in two groups. Was the study a randomized trial? The authors should mention were the patients assigned in groups based on their clinical conditions and based on physician decision or they were randomized in one of two groups? In addition, if the patients were selected for groups, what was the criteria for selecting the treatment group for each patient.
11- If the study is a randomized trial, was it blinded? In addition, if the study is trial, please mention the registration number of study in valid clinical trial registries.
12- Count data is nominal data. In addition, measurement data is continuous or scale data. Please correct. In addition, please add in the stat method section the normality of data was checked before analysis.
13- Please document comparisons by exact P-values. [For example, these sentences need P-Values: There was no significant difference between the two groups, ….and the difference was statistically significant].
14- It is better the data of VAS and ODI will be analyzed by a mix model ANOVA [P-values of the mixed model is better to be mentioned] and this be added to current analysis. Comparison in each group in different successive times needs repeated measure ANOVA [if data are normally distributed; this should be mentioned in paper that the data are normal or not]. In addition, comparison between two groups in the same times is performed by t-test.
15- Please mention the p-value for table 3 analysis.
16- What are the characters in tables 1 and 2.

17- It is unknown if the study is a trial or observational study. please explain in the paper.
18- Was the sampling method simple sequential?
Thanks.

REFEREE: Associate Editor | **Revision** (0) 14 Jan 2019

Dear EIC,
The manuscript is studied, and there are some comments which should be addressed by the author. According to the comments, the document needs major revision.
Kind regards,

REFEREE: EIC | **Revision** (0) 15 Jan 2019

Dear Author,
The reviewers' comments are mentioned. Please correct the details as mentioned above carefully according to reviewers' request.
Thanks.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

1、*Please add in abstract method and in paper which variable was assessed by VAS? It seems it is pain but should be mentioned clearly in the paper and abstract.*
Patients' pain was assessed were assessed by visual score scale
2、*it seems ODI is disability not dysfunction.*
It has been revised.

3-Please delete: "There was no significant difference in operation time" [only P-value is sufficient] and mention P-values in exact number. (P>0.05 is insufficient, exact number is preferable).
It has been revised.

4-please revise carefully the English writing of paper [for example One case occurred cement leakage in the BFMCS group should be: Cement leakage occurred in one case in the BFMCS group].
It has been revised.

5-please mention VAS an ODI in pre-procedure and 6 months only [in abstract results]. No need to mention all 4 data. [for example, VAS dropped from 7.50±0.95 in pre-operation to 1.20±0.41 in 6 months follow up in PKP group] In addition, please mention P-values for reduction of VAS and DOI in successive times in abstract. In addition, please mention P-Value for comparison of leakage between two groups.
It has been revised.

6-please add objective part to paper according to journal format.
It has been revised.

7-please write this sentence as the first sentence of method before inclusion an exclusion criteria: "A total of 40 patients with thoracolumbar osteolytic metastases (72 vertebral bodies) who underwent vertebroplasty from October 2016 to January 2018 were enrolled, including 47 thoracic vertebrae and 25 lumbar vertebrae."
It has been revised.

8-please mention method for differentiating osteoporotic fracture from metastatic osteolytic fractures.
The pathological examination can confirm the metastatic osteolytic fractures

9-the authors mentioned: "and the pathological examination confirmed the metastatic tumor" as inclusion criteria. It is unknown if the authors mean the proving the source tumor by pathology or vertebral metastasis was proved by histology? Did authors take biopsy from all vertebral lesions before procedure?
Combine the patient's basic disease with pathological examination, we can proving the source tumor. Each patient underwent pathological biopsy at the time of surgery

10-one important point is the method of assignment the patients in two groups. Was the

study a randomized trial? The authors should mention were the patients assigned in groups based on their clinical conditions and based on physician decision or they were randomized in one of two groups? In addition, if the patients were selected for groups, what was the criteria for selecting the treatment group for each patient.

This was a retrospective study .In clinical practice, these two surgical methods are used to treat vertebral metastases with vertebral body posterior marginal damage. Patients voluntarily choose the surgical method, We took a random sample from patients with the same type of surgery.

11-if the study is randomized trial, was it blinded? In addition, if the study is trial, please mention the registration number of study in valid clinical trial registries.

This study is a retrospective study, it wasn't blinded. All the surgical methods we adopted were approved by the ethics committee of Guizhou provincial people's hospital.

12-Count data is nominal data. In addition, measurement data is continuous or scale data. Please correct. In addition, please add in stat method section the normality of data were checked before analysis.

It has been revised.

13-please document comparisons by exact P-values. [For example, these sentences need P-Values: There was no significant difference between the two groups, ….and the difference was statistically significant].

It has been revised.

14-It is better the data of VAS and ODI will be analyzed by a mix model ANOVA [P-values of mix model is better to be mentioned] and this be added to current analysis. Comparison in each group in different successive times needs repeated measure ANOVA [if data are normally distributed; this should be mentioned in paper that the data are normal or not]. In addition, comparison between two groups in the same times is performed by t-test.

It has been revised.

15- please mention p-value for table 3 analysis.

It has been revised.

16-what are characters a in tables 1 and 2.

It has been revised.

17-it is unknown if the study is trial or observational study. please explain in paper.

This study is a retrospective study

18-was the sampling method simple sequential?

Yes

OPEN PEER REVIEW

Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision (1)** 8 Apr 2019

Dear AE,
The authors have corrected many parts. some points are left to be corrected as follows:
1- P=0.00 is wrong. It should be written as P<0.001.
2- Please delete “P-value is sufficient(P =0.91)” in added part of: “P-value is sufficient(P =0.91)”
[only (P =0.91) is sufficient.]
3- I think this sentence is useful and it is better to be added in the text: “Combine the patient's basic disease with pathological examination, we can proving the source tumor. Each patient underwent pathological biopsy at the time of surgery”
4- I think this sentence is useful and it is better to be added in text: “This was a retrospective study . In clinical practice, these two surgical methods are used to treat vertebral metastases with vertebral body posterior marginal damage. Patients voluntarily choose the surgical method, We took a random sample from patients with the same type of surgery.”
5- The authors mentioned: “The Oswesty dysfunction index before surgery was lower than that at all time points after surgery, and the difference was statistically significant” this is wrong as the ODI is HIGHER preoperative than postoperative values. please correct.
6- It seems ODI is disability not dysfunction. Please correct in all parts of paper.
7- The authors mentioned the sampling is sequential in response to question 18 and they mentioned they took a random sample from all patients with a certain procedure method.it is better the authors clarify these points in the paper.
Thanks.

REFEREE: Associate Editor | **Revision (1)** 27 Apr 2019

Dear EIC
The reviewer(s) have recommended publication, but also suggest some minor revisions to the manuscript. Therefore, I invite the author to respond to the reviewer(s)' comments and revise his manuscript.
Kind regards,

REFEREE: EIC | **Revision (1)** 28 Apr 2019

Dear Author,

The reviewers' comments are mentioned. Please correct the details as mentioned above carefully according to reviewers' request.

Thanks.

OPEN PEER REVIEW

Revision (2)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

1-P=0.00 is wrong. It should be written as P<0.001.
It has been revised.

2-please delete "P-value is sufficient(P =0.91)" in added part of: "P-value is sufficient(P =0.91)" [only (P =0.91) is sufficient.]
It has been revised.

3-I think this sentence is useful and it is better to be added in text: "Combine the patient's basic disease with pathological examination, we can proving the source tumor. Each patient underwent pathological biopsy at the time of surgery"
It has been revised.
4- I think this sentence is useful and it is better to be added in text: "This was a retrospective study .In clinical practice, these two surgical methods are used to treat vertebral metastases with vertebral body posterior marginal damage. Patients voluntarily choose the surgical method, We took a random sample from patients with the same type of surgery."
It has been revised.
5-the authors mentioned: "The Oswesty dysfunction index before surgery was lower than that at all time points after surgery, and the difference was statistically significant" this is wrong as the ODI is HIGHER preoperative than postoperative values. please correct.
It has been revised.

6- it seems ODI is disability not dysfunction. Please correct in all parts of paper.
It has been revised.

7-the authors mentioned the sampling is sequential in response to question 18 and they mentioned they took a random sample from all patients with a certain procedure method.it is better the authors clarify these points in the paper.
It has been revised. I'm sorry for the translation mistake last time. We took a sample with simple random sampling Methods from patients with the same type of surgery, we have described it in the paper.

OPEN PEER REVIEW

Revision (2)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (2) — 11 Jun 2019

Dear AE,
The study is reviewed carefully. According to comments and revisions by the author, this manuscript is accepted.
Thanks

REFEREE: Associate Editor | **Revision** (2) — 24 Jun 2019

Dear EIC
Based on the authors' answers to the reviewers' comments, the reviewer(s) have recommended publication.
Kind regards.

REFEREE: Associate Editor | **Revision** (2) — 27 Jul 2019

Dear EIC,
The author should respond to all comments one by one.
1- In the abstract and throughout the manuscript, you have mentioned VAS as visual score scale. This is not right. Shouldn't it be visual analog scale? Please clarify.
2- In the statistical analysis, please give the manufacturer's name and characteristics for SPSS.
3- In parts A and B of the figure legend, you have mentioned what the CT scan shows, but you have not mentioned when this CT scan is for. Please add details.
Thank you.

REFEREE: EIC | **Revision** (2) — 28 Jul 2019

Dear Author,
Your article is reviewed by the reviewers carefully. According to their comments, this document needs minor revision. Please follow their comments as requested.
Thanks.

OPEN PEER REVIEW

Revision (3)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Associate Editor 1:
accepted
Associate Editor 2:

Thank you for your advice, dear editor. Your rigorous logical thinking impressed me a lot.

1-In the abstract and throughout the manuscript, you have mentioned VAS as visual score scale. This is not right. Shouldn't it be visual analog scale? Please clarify.

It has been revised.

2-In the statistical analysis, please give the manufacturer's name and characteristics for SPSS.

It has been revised. SPSS Statistics for Windows, Version 17.0. Chicago: SPSS Inc.

3-In part A and B of the figure legend, you have mentioned what the CT scan shows, but you have not mentioned when this CT scan is for. Please add details.
Thank you.

It has been revised.

OPEN PEER REVIEW

Revision (3)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Associate Editor | **Revision** (3) 30 Jul 2019

Dear EIC
Based on the authors' answers to the reviewers' comments, the reviewer(s) have recommended publication.
Kind regards.

REFEREE: EIC | **Revision** (3) 31 Jul 2019

Dear Author,
The document is reviewed carefully by the reviewers. According to their comments and your revisions as requested, this manuscript is accepted.
Thanks.