

PEER-REVIEW REPORT

Name of journal: World Journal of Orthopedics

Manuscript NO: 32965

Title: Nuclear medicine imaging in osteonecrosis of hip: Old and current concepts

Reviewer's code: 02705200

Reviewer's country: Bulgaria

Science editor: Fang-Fang Ji

Date sent for review: 2017-06-13

Date reviewed: 2017-06-19

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|--|--|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input checked="" type="checkbox"/> Grade A: Priority publishing | Google Search: | <input checked="" type="checkbox"/> Accept |
| <input checked="" type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input checked="" type="checkbox"/> Plagiarism | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | [Y] No | <input type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | [Y] No | |

COMMENTS TO AUTHORS

The authors presented excellent review, that could be accepted for publication.

PEER-REVIEW REPORT

Name of journal: World Journal of Orthopedics

Manuscript NO: 32965

Title: Nuclear medicine imaging in osteonecrosis of hip: Old and current concepts

Reviewer's code: 03518978

Reviewer's country: United States

Science editor: Fang-Fang Ji

Date sent for review: 2017-06-13

Date reviewed: 2017-06-27

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|---|---|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing | Google Search: | <input type="checkbox"/> Accept |
| <input type="checkbox"/> Grade B: Very good | <input checked="" type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input checked="" type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input type="checkbox"/> Plagiarism | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | [Y] No | <input checked="" type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | [Y] No | |

COMMENTS TO AUTHORS

This review summarized the imaging modalities for detecting early femoral head osteonecrosis. Generally this is an interesting topic and very useful in clinical practice. However, there are a few concerns that need to be clarified. 1. RE: "Magnetic resonance imaging is a commonly used imaging modality to detect early osteonecrosis. When MRI is inconclusive, bone scan is also helpful in detecting osteonecrosis during early phase of the disease." The majority of bone scans that are done are non-specific and they are not better than an MRI in diagnostic accuracy for the osteonecrosis. The use of "bone scan" is too general here. Compared to an MRI, the 18F-fluoride PET/CT bone scan may have similar sensitivity but lower specificity. MRIs usually have both higher sensitivity and specificity when compared with other bone scan modalities. 2. There is a little bit concern of the format of current review. It was not a systematic review; did authors follow the format of a prospective review? How did the authors choose the papers to be summarized? 3. RE: "Early recognition of the disease is essential because

early surgical core decompression of the femoral head may arrest progress of the disease and prevent collapse of the head.” As it is still controversial that early surgical core decompression of the femoral head may arrest progress of the disease and prevent collapse of the head, it is better to remove the last part.

PEER-REVIEW REPORT

Name of journal: World Journal of Orthopedics

Manuscript NO: 32965

Title: Nuclear medicine imaging in osteonecrosis of hip: Old and current concepts

Reviewer's code: 00467031

Reviewer's country: Taiwan

Science editor: Fang-Fang Ji

Date sent for review: 2017-06-13

Date reviewed: 2017-07-07

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|---|---|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing | Google Search: | <input type="checkbox"/> Accept |
| <input type="checkbox"/> Grade B: Very good | <input checked="" type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input checked="" type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input type="checkbox"/> Plagiarism | <input checked="" type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | [Y] No | <input type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | [Y] No | |

COMMENTS TO AUTHORS

This mini review attempted to deduce that bone scan is helpful in detecting osteonecrosis (ON) during early phase of the disease, although magnetic resonance imaging (MRI) is a commonly used imaging modality to detect early ON, especially in inconclusive imaging. After they reviewed the role of newer nuclear medicine equipment, like single photon emission computed tomography (SPECT)/CT and positron emission tomography (PET)/CT, in ON of femoral head, they concluded that these imaging modalities are now widely available in routine clinical practice. However, there are a number of issues that require further consideration: 1. Is the data sound without the statistical analysis? Are there sufficient data to support the conclusion? 2. Is Table 1 necessary when there are only two obvious groups? The authors need to provide more comparisons between them to attract the audience. 3. Editing is required. For examples, A. Like magnetic resonance imaging, single photon emission computed tomography and positron emission tomography should be spelled out when they

appeared in the first time in Abstract. Additionally, "equipment" is an uncountable noun, so "equipments" is wrong. B. In the last sentence of Introduction, there should be a space between "femoral" and "head" as well as "collapse" and "of". C. Table 1 is better than Table-1.