The relationship between Body Mass Index and the localization of fifth metatarsal base fracture: an epidemiological study.

The Authors have performed and retrospective analysis of the BMIs of patients sustaining a 5th Meta-tarsal base fracture and correlated this to location of the fracture. They found that those with the high BMIs were more significantly more common in those sustaining a fracture within the diaphysis.

General comments:

The Reviewer enjoyed reading this paper, that it demonstrates reasonable methodology and has an interesting result, which will add to the literature.

There are a number of changes, which the Reviewer feels should be made prior to re-submission. Firstly the scoring system of the location of the fractures seems ridiculous and needs to be removed.

Next the Discussion, in its current form, is more of a review article and so needs to be considerably shortened and needs to focus on the aspect of this study.

Can the Authors be consistent are the zones categorized as 1, 2 and 3 or I, II and III. Please refer to original paper of Lawrence and Botte.
Specific comments:

Abstract:

Foot Xrays.. Is this sentence really necessary? On which radiograph is the LB classification made?

Is the description of the statistical analysis essential for the abstract? Please omit.

Results: Delete the first 5 words. Just from… This means that patients with the highest BMI, have the highest frequency of fractures that are more associated with non-union.

Conclusion: Please rewrite the first 2 sentences of the conclusion these are findings of the study. and then remove the final sentence.

Background:

L31 This is a suggestion of poor English to come in the paper. If you cannot get it right in the first sentence it does not bode well.

L33 please remove the term further, this is the first classification.

L35 does this mean more distally than the base or more distally than the proximal diaphysis please rewrite.

L37 Add citation Martin O'Malley.

L41 Please improve this sentence, it does not make sense, shorten, add citations of the several studies that have investigated.

L43 If this study just involves fractures of the base the description on L36 of the Dancers fracture can be removed.

L43 Please avoid the use of the term we. Write using the passive voice.

L44 5th metatarsal base fractures rather than this condition.

Methods:

L50 Please rewrite and leave out initial pool.
L51 This is a methodological concern, as fall off steps; foot inversions would be excluded reducing the numbers in the study.

L53 Please explain what second localization means

L55-60 The Reviewer does not agree the methodology of this scoring is valid. It seems ridiculous but could be correct. Can the Authors please describe the reliability and reproducibility of this technique? and please will they for the Reviewer?

Results:

L76 Please omit the chi squared here, already commented in methods.

Discussion:

L82 Please start the discussion with the sentence, the most important finding of this study is…this sets the tone for the paper.

Also please can the Authors remember the discussion is a discussion about their study not a Review article on the subject.

L88 There is repetition in the content from the introduction, please leave/expand the introduction and focus the discussion on this study.

L92 Please check the eponym, the Reviewer is unfamiliar with the term Stewart's fracture. Please can the Editor Confirm whether an Author is able to create an Eponym or should they cite the paper in which the eponym in first used?

L94-99 Please rewrite, perhaps illustrate with figure.

L102 Please give citation.

L114 This comment was earlier highlighted by the Reviewer. The Reviewer notes the Author's comment here.

L128 Does this paragraph add to the paper? : we hypothesise is very formal, it is possible is better.
L170 This is very long discussion and perhaps can be shortened.

L173-180 Please remove this paragraph, it does not really add to the study in question.

Conclusions: Please limit the comments in the conclusions to those that can actually be made from this paper.

References:
Please consult the IFA regarding page numbering is it 49-55 in ref 3 or 537-8 in ref 4?

L262 Space or no space after :

Figure: Please can the Authors work on providing better images, the distinction between the zones is not clear on the current one

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Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

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

Needs some language corrections before being published

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