Reviewer’s report

Title: Tibiotalocalcaneal (TTC) arthrodesis with reverse PHILOS plate and medial cannulated screws with lateral approach

Version: 0 Date: 21 Dec 2016

Reviewer: Kaj Klaue

Reviewer's report:

The authors report about a clinical series of 12 patients selected for tibio-talo-calcaneal fusion. The mean follow-up time is 18.6 months. The work is difficult for understanding because of the poor English syntax.

Abstract.

[…]the fusion rate is often lower than the ordinary tibiotalar arthrodesis BECAUSE of the more serious joint disease associated with obvious deformity and osteoporosis […] As Background statement there is no evidence for associating difficult tibiotalocalcaneal fusion with osteoporosis and primary deformity. In addition, the authors should explain what they mean by ordinary tibiotalar arthrodesis.

The authors should also explain what makes this plate special in relation to another plate fixation (e.g. blade plate) through the same approach.

Background.

Line 27-30: There is no reference indicating the higher likelihood for blade plates for breaking and deep infection.

Surgical Techniques.

Line 12: where is the incision: anterior or posterior to the fibular crest?

Line 16: what happens to the fibular tendons when the fibula is removed. Explain.
Post-operative care.

Line 56: 24h antibiotics. Single shot or more? explain

Results.

Line 18-19: achieved a stable pseudarthrosis. Explain

Discussion.

Line 35: […] joint disease for tibiotalocalcaneal arthrodesis is more serious: explain serious […] and are mostly associated with osteoporosis: reference?

Fusion rate is often lower: relation to the osteoporosis, explain

[…] retrograde nail […] implant irritable: explain

[…] it is more advantage if compared with other method: there is no evidence for this statement based on this study.

Conclusions.

Line 51: there is no evidence for the advantage of "reverse plate" or "reverse PHILOS plate" for TTC arthrodesis. The authors should eventually concentrate on the surgical approach which might present advantages.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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