Author's response to reviews

Title: Critical Factors in Cut-out Complication after Gamma Nail Treatment of Proximal Femoral Fractures

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Author's response to reviews: see over
Cover letter

Re: 1251340395786832

Critical Factors in Cut-out Complication after Gamma Nail Treatment of Proximal Femoral Fractures

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Dear Editors and Referees,

Thank you for the revision of our manuscript, the comments are helpful and valuable. The main text, figures and tables have been formatted according to BMC templates.

Referee 2 pointed out the cumbersome layout of the Results: would you like us to delete the sub-subheadings from the “Analysis of factors in 57 primary cut-out complications”? We think such subdivision enables the reader to find and follow the structure of the discussion.

The institutional review board at CTO hospital gave ethics approval before the study was commenced. Due to the retrospective nature of the study no burden or risk was imposed on the patients. This comment has been included in the Methods section.

We have addressed your comments and made the following changes:

Referee 1

1.) Page 4 and 6: we state in Methods: “The present study is a continuation of the previously published work by Bojan et al.” [1], where we explain in detail the issue of loss to follow up. We assume that we do not have to repeat some of these considerations in the present work; however, we discuss the loss to follow up as limitation in the discussion. In the present publication we focus on the characteristics and the mechanism of the cut-out complication, and we have no reason to suspect that the drop-out rate would influence such factors.

2.) Page 9 and 11: the low number of cut-out cases in each zone (3 and 5 cases respectively) would not allow a reliable statistical statement. We discuss the optimal placement of the lag screw in the femoral head based on own results and current literature.

3.) Page 13 and 14: it is widely known that hip fractures occur predominantly in patients with osteoporosis [2]. We cannot conclude either, that the absence of the cut-out complication was due to good bone quality in other patients. Since the bone quality is a widely discussed factor responsible for osteosynthesis complications on older patients, we would like to maintain this paragraph in
our article. Moreover, it emphasizes the need of further prospective study on this matter using reliable tools.

4.) Figure 1: corrected
5.) Figure 5: corrected
6.) Figure 2: corrected
7.) We present and discuss the varying quality of the radiographs in the previous work by Bojan et al. [1]
8.) Figure 6: corrected, in Word document
9.) Figure 7: corrected

Referee 2

Minor essential revisions:

We state in Methods: “The present study is a continuation of the previously published work by Bojan et al.” BMC Musculoskeletal Disorders 2010, where we explain in detail the problem of loss to follow up. We assume that we do not have to repeat certain considerations; still, we discuss the loss to follow up as a limitation in the discussion. In the present publication we focus on the characteristics and the mechanism of the cut-out complication, and we have no reason to suspect that the drop-out rate would influence such factors.

Discretionary revisions:

Results – Fracture pattern: femoral shaft fractures corrected to “combined trochantero-diaphyseal femoral fractures” which were treated with Gamma Nails in these series [1]

We ask the Editor about the lay out of the Results.
Figure 6 has been processed in Macintosh computer, we will point this out to the Editor.
Figure 7: the legend has been added.