Reviewer's report

Title: Assessment of the effects of a static magnetic field on bone healing process in rat femurs

Version: 1 Date: 12 April 2006

Reviewer: Hans Peter Wiesmann

Reviewer's report:

General

The paper deals with bone healing effects of a static magnetic field in vivo. The authors demonstrate their results of three animal (Rattus norvegicus albinus) groups by showing figures of histological analysis without any quantification.

It could be helpful to have additionally one figure that shows the static magnetic field in vivo and another figure which explains the results of the histological analysis in a schematic way (orientation...).

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Abstract:
- Line 1: The aim of this this
- Line 3: Puricelli, E (2001)? Not in the references!
- Line 7: Two animals was (were)
- Line 10: Washers were placed in a way to (in that way that they allowed mutual attraction forces)
- Line 19: -Buried into (buried in)

Background:
- Line 11: the mechanisms through which (by which)

Methods:
- Line 3: Puricelli (reference?)
- Line 3: Twenty-one (21)
- Line 5: 450 gramas (grams), groups (blank)
- Line 11: They were kept over (held over)
- Line 13: (blank) Fisic Institut
- Line 18: Dyaphisis (Diaphysis)
- Line 23: Cavity(.)

Results:
- Line 7: populated of cells (populated with)

Discussion:
- Line 1: As in many other studies such as those reported rat was used as a model. (As in many other studies reported, rat was also used as a model in this study.)
- Line 7: The surgically prepared bone cavity presented only one ruptured cortical, maintaining according to the concept of the reproducibility of a fixed fracture. (meaning?)
- Line 23: respectively employed (employed respectively)
- Line 38: in sites of bone fractures (at bone fractures)
- Line 66: Which represent an original approach? (meaning?)

Author's contributions:
- wrong format: Deise Ponzoni

References:
- 4. Title bold?

Figures:
- label for blood vessels is missing in figure 4
- figure 7: Bone remodelling with normal histological patterns, going beyond the cortical external border, is remarkable. (is observed?)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.