Reviewer's report

Title: Time Course of 1,25-(OH)2D (Vitamin D) as well as PTH (Parathyroid Hormone) during Fracture Healing of Healthy and Osteoporotic metaphyseal human Bone

Version: 4 Date: 21 October 2012

Reviewer: Koshi Kishimoto

Reviewer's report:

The authors have achieved a lot of revisions and improvements. However, this manuscript still contains many points to be corrected. Some comments and questions raised this and other reviewers are not enough improved.

Major points

The authors divided subjects by BMD into two groups. They mentioned these groups in different ways; ‘healthy’ or ‘osteoporotic’ in the text, ‘healthy’ or ‘diseased’ in table 1, ‘osteoporotic’ or ‘control’ in figures. As this reviewer pointed out in the first report, bones with fracture are not ‘healthy’ any longer and if fractures were happened by minor trauma, they should be diagnosed as osteoporotic fracture. This reviewer recommends that the authors define two groups as ‘low BMD’ and ‘normal BMD’ groups when they divided subjects by BMD. Once they defined, please stick on it throughout the whole contents including title, text, table, figures and their legends.

The authors did not list cortico-steroid use and bone metabolic diseases such as osteomalacia, hyperparathyroidism, Paget’s disease etc. as exclusion criteria. The authors should exclude these patients from analysis.

As another reviewer pointed out, they committed the misinterpretation of the data. The authors still mentioned the time course of PTH showed an ‘increase’ in the first week, although there was not significant difference.

Table 1. The authors compared two groups in this article. They have to analyze differences in patients’ baseline demographic data statistically. Please show mean ± standard deviation with p-values of BMD (g/cm2), BMI, height, body weight, creatinine, Ca, P (not Na, K), 25(OH)D and PTH and describe that there was not significant difference in patients’ demographic data.

Minor points

Table 1 Authors should learn how to make tables for scientific articles. Usually, cells with horizontal and vertical lines from Excel are not allowed. Please make tables only with horizontal lines.

Figure 1&2

The figures still contain a lot of German words. Also decimal points are still
indicated by commas. The authors seemed to be very found of Excel. Unfortunately, figures just exported from Excel do not provide enough quality to be published as a figure. Figures will be published as it is. This reviewer believes that good scientists stick to the quality and scientific beauty in the figures.

**Level of interest:** An article of limited interest

**Quality of written English:** Not suitable for publication unless extensively edited

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

**Declaration of competing interests:**

I declare that I have no competing interests.