Reviewer's report

Title: Piezoelectric osteotomy in hand surgery: First experiences with a new technique

Version: 2 Date: 11 November 2005

Reviewer: robert strauch

Reviewer's report:

General

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

Page 7, line 14: the authors note that minimal preparation of the bone is needed prior to the osteotomy, and yet they still cut the periosteum and the surgical exposure in Figure 2, with hohman retractors around the bone is identical to the exposure that would be used with a traditional oscillating saw. How is this exposure and soft tissue handling any different? Can the osteotomy be performed without stripping the periosteum and without retracting the soft tissues, since this device theoretically does not cut the soft tissues?

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

1) Abstract: In Method: "We will report on our experiences with a follow up time of one year" should be "We will report on our experience with one case, with a follow up time of one year."

2) Page 3, abstract. What is hollow cutting?

3) Page 4, second sentence, 'adapted' should be 'varied'.

4) Page 4, line 3: What problems are produced with magnification?

5) Page 4, last sentence: The authors indicate that an integrated pump is available for cooling. How hot does the tip actually get?

6) Page 5, last sentence: same point as in #1 above.

7) Page 6, first sentence, should be "a 23 year old worker who suffered a malunited metacarpal bone fracture."

8) Page 6, line two, should be, "X-rays revealed a 45 degree angular deformity of the fifth metacarpal neck with internal rotation."

9) Page 7, line 5, should end, "...nor is there the danger of a break out.", not 'brake'.

10) Page 7, line 9, what is 'hollow cutting'?

11) Page 7, line 12: The authors mention that the downside of the device is the slow sawing
process; how long did it take?

12) Page 8, last sentence: should be, "The patient as well as the surgeons were fully satisfied with the result."

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory 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

**Declaration of competing interests:**

I declare that I have no competing interests.