Reviewer’s report

Title: Does a minimal invasive approach reduce anterior chest wall numbness and postoperative pain in plate fixation of clavicle fractures?

Version: 1  Date: 11 March 2015

Reviewer: Gerard Slobogean

Reviewer's report:

Major Revisions: None

Minor Essential Revisions:
Line 69: add hardware removal and an appropriate citation

Line 87 and all other references: Change dislocated to “displaced” or “fully displaced”

Line 109 and 120: For section titles, use the full description not the abbreviation

Line 117: was the plate placed superiorly or anteriorly? Add this small important detail to the description.

Line 153: typo “area”

Reporting the absolute value for skin incision length and numbness area is important. The incision-plate ratio and the numbness-plate ratio are good concepts, but realistically are difficult to interpret. What is a clinically significant difference between the groups? The manuscript would benefit from some further explanation on what might be significant.

Line 197: This needs to be changed because it suggests that this trend was potentially clinically significant, but not statistically significant…and for the duration of the study. Your results suggest a possible clinically significant difference on post op day one, but post-op day two and 14 there was no clinical or statistical difference.

Line 203-205: Please provide a citation that supports this statement or remove it.

Line 216: Please add a qualifier about the pain; I suggest either “possibly” or “potentially” less pain

Line 241: need to change the statement about less pain. Perhaps even include info about what the minimum clinical important difference is for VAS pain.

Line 267: In my experience, postoperative pain from clavicle fractures is not a common surgical complication. Furthermore, your data shows a VAS pain score of <2 at all time points, which does not support your claim that this is a common complication.
Line 270: modify claim about less pain, as discussed above.

Table: Please add the summary statistics for each column (variable) to the table. This could perhaps go on a separate line at the bottom.

Figure 2: The figure submitted is useful to see the grid system and put into perspective the area of numbness; however, this figure is misleading because you used examples with an area half the size of the mean in the MIPO group and three times larger than the mean in the CPO group.

Please either replace the figure with more representative examples or use a healthy volunteer and place grids that have the mean areas of numbness (7.5 cm² and 26 cm²) on their chests so the readers can better interpret your reported results.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**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