

Answering reviewers

1. In the abstract it might be made clear that RTS refers to time since the conservative or surgical procedure. Was there any information on the time from injury to the procedure?

1. This has been added to paragraph 2 in the “Methods Section” in the abstract.

2. The literature search section in materials and methods might include information on how disagreements were resolved between the authors as to whether or not a paper should be included? Did each author really scan almost 30,000 titles? This seems very time consuming!

2. All the articles were scanned.

3. It should be made clearer in the materials and methods section how the combined RR estimate for RRS of 1.09 (1.00-1.18) was derived. I can reproduce this by a simple comparison of the overall rates 81/83 and 69/77, but mention of a random effects meta-analysis is made. While this might have produced the same answer, it is not clear how the various individual study 100% rates were dealt with, nor how the authors coped with the fact that some comparisons were within-study and some between-study. I wonder also whether it might be better to present these results as relative risks of failure, i.e. a RR of 4.31 (on a single two group comparison). This might be more meaningful to many readers.

3. The risks ratios were calculated through the RevMan Programme – there is a random effects mode for this which we selected. The authors agree with the reviewer that there are a variety of different ways of demonstrating the RRs, but from their previous similar peer-reviewed published meta-analyses, they feel their selected method adequately describes the results.

The comparisons were made from synthesis cohorts of the relevant studies: these were collated using summation of the number of athletes per study. Return rates were collated using a summation of the number of returns from the relevant studies.

4. Figure 1 could be reorganized slightly by combining the top two boxes. As it is, it looks as if the 6,083 results of the database search found 131 abstracts to be assessed for eligibility, while 29,552 of the 23,600 results from other sources were excluded (clearly impossible). Also the bottom right-hand box seems to have no right-hand edge.

4. We have combined the top two boxes, as requested.

5. It might be useful to define somewhere what “pre-injury level of sport” means and how such information was obtained. Does “level” mean playing in the same league as before, for example, or playing with the same degree of ability?

5. “Pre-injury level of sport” is now defined in paragraph 3 under “literature search” in Materials and Methods section.

6. Table 2 is referred to initially in the materials and methods section when it is really a result. It would be better to introduce Table 2 in the results section immediately after the search section summarizing the types of information it contains. In any case the content and structure of Table 2 needs thought.

It might be better to restrict it to what are characteristics of the studies, giving the results separately, perhaps in a table linked to the meta-analyses results. Besides Table 2 being too busy, there are some points that need attention, including no information on where the study was conducted (“location” confusingly referring to location of the injury), sex or age of the patients, and lack of clear linkage of the abbreviations used to the column where they apply, and use of abbreviations that do not occur (e.g. PCS).

6. Table 2 is now introduced in the results section as requested. The authors have now divided this table into two tables: the first table (Table 2) summarising the study characteristics; and the second table (Table 3) summarising the results of each study accordingly.

7. The statistics section of the material and methods refers to cohorts of “sufficient” size. What is sufficient?

7. The authors performed meta-analysis on cohorts with greater than 50 participants. Power analysis confirmed this was sufficient to detect the observed differences, with type 1 errors set at 0.05 and type 2 errors at 0.20.

8. It is stated in the materials and methods section that the 12 statistic was used, but I see no reference to it in the results section.

8. I^2 has been used in the meta-analysis section of the results i.e. (RR, 1.09; 95%CI, 1.00 to 1.18; $p < 0.045$; $I^2 = 0\%$, $p = 0.78$).

9. In the results section, I suggest incorporating of much of the first sentence of “patient demographics” into the “search” section. In any case, the heading “patient demographics” hardly applied to what is in the third paragraph below.

9. This has been moved as requested. The sentence starting with “The search strategy...” has been moved under the Search paragraph. “Of the 160 fractures...surgical fixation” moved under Management.

10. In paragraph 2 of the discussion, there is a reference to “similar” studies. Similar in what way? Presumably studies of other types of fracture.

10. We have expanded on this point to allow the reader understand what it is referring to.

11. The conclusion section refers to the risk of surgical complications. Do the papers considered provide any information on the extent of this?

11. The complications are highlighted in Table 3.

There are also a number of places where the English could be slightly improved. In the order of the text: Data sharing statement : “The technical appendix are available.....”

Abstract: RESULTS sentence 1 : “..... and three case series” **corrected**

Next sentence : “..... and eight on surgical management (n = 83)” **corrected**

Next sentence : “..... and the mean RTS was”. **Corrected**

Similarly for the first sentence in the following paragraph. **Corrected**

Could similarly insert the word “mean” later in the paragraph.

Paragraph beginning “On meta-analysis” : One could delete all the commas before RR and 95% CI. **Corrected**

Introduction line 2 : “occurring at a rate” **Corrected**

Introduction para 2 line 2 : “in the anatomic snuffbox” **Corrected**

Introduction para 2 line 4 : is “tenderness in the anatomical snuffbox or scaphoid tubercle.....” meant? Is it “anatomic” or “anatomical”? **Corrected**

Introduction para 4 line 9 : “recommend” reads easier than “advise for” **Corrected**

Introduction para 4 line 13 : “..... practice” of these injuries still remains varied.....”

Corrected

Results Fracture Location para 4 line 2 : There seen to be seven references for using the Herbert classification, despite only four studies using it. **References removed as already mentioned in the sentence.**

Management para 2 line 3 : “..... provided the patient with a specific” **Corrected**

Functional assessment page : There are two places on this page where the word figure should start with a capital F **Corrected**

Next page – Surgical Management para 3 : Should end “..... (6-9) weeks.” **Corrected**

Discussion page 2 first main para : The English of the sentence beginning “This is likely accounted for by.....” could be improved by avoiding colons and semi-colons, and not repeating “compared to ORIF” three times. **Corrected**

Discussion final para : Should start “The final limitation comprises the variety” **corrected**