

Mr Michalis Panteli MD, MRCS (Eng)
Honorary Lecturer University of Leeds
Academic Unit of Trauma & Orthopaedics
A Floor, Clarendon Wing
Leeds General Infirmary

April 28, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: Revised Manuscript - 17355.doc).

Title: Simple elbow dislocations: Management, direct medical cost and clinical outcome

Author: Michalis Panteli, Ippokratis Pountos, Nikolaos Kanakaris, Theodoros Tosounidis, Peter V. Giannoudis

Name of Journal: World Journal of Orthopedics

ESPS Manuscript NO: 17355

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewers:

Comments to the Author

This is a nice retrospective study that focused on the clinical outcome after the reduction of simple elbow dislocation. However, there were several drawbacks mainly in the study design. Please consider following comments and questions.

1. P7, L4: What was the "small avulsion fractures"? Please define the inclusion criteria more precisely.

We would like to thank the reviewer for their comments. Inclusion / exclusion criteria are now more precisely defined in the manuscript.

2. P7, L17: It seemed that the patients who did not come to the original date of appointment constituted Group 3. Did the authors confirm that those patients really continue the immobilization for more than 3 weeks? Did they really follow the treatment program?

We would like to thank the reviewer for their comments. As mentioned in the manuscript, "The major cause of the prolonged length of immobilisation of patients in Group III was the lack of adherence to their scheduled outpatient trauma clinic appointments." Time length of elbow immobilization was clearly documented in the patient's notes. If a patient did not attend his appointment but removed his backslap, he was allocated in the relevant group according to the period of immobilization (and therefore not until their review at the fracture clinic). These patients were generally non compliant to the doctor's instructions and most of them did not attend their physiotherapy sessions, a factor reflected on the overall costs of their treatment.

3. P9, L2: The number of significant figures should be the same throughout the manuscript.

We would like to thank the reviewer for their comments. The number of significant figures is corrected to be the same throughout the manuscript.

4. P9, L10: In 8 patients (10%), no x-rays were taken before the reduction. These patients might better be excluded from the study group.

We would like to thank the reviewer for their comments. If the dislocation was obvious and access to radiography was expected to significantly prolong time to reduction, the reduction was advised before radiographs were taken in order to relieve the pressure to the soft tissues, thus reducing the risk of neurovascular injury. The presence of a dislocation was then clearly documented in the notes, but since radiographic evidence of the direction of dislocation was not available, we did not include these patients in the analysis of direction of dislocation. Moreover, in the inclusion criteria we state that we included "clinically and / or radiologically confirmed acute "simple" elbow dislocations".

5. P10, L11: ...used was in Group ... Probably, "I" was missing in this sentence.

We would like to thank the reviewer for their comments. This is now addressed.

6. P13, L1: ...two patient in... should be ...two patients in...

We would like to thank the reviewer for their comments. This is now addressed.

7. Discussion: The limitations of the present study should be described in the discussion.

We would like to thank the reviewer for their comments. A paragraph describing the limitations of the present study is now added in the discussion.

8. Table 3: The title of this table should be reconsidered.

We would like to thank the reviewer for their comments. The title of the table is now changed.

Reviewer: 2

Comments to the Author

1. Abstract: Methods: I'm not sure I would consider a 100 degree arc of motion a satisfactory outcome. Yes, there have been studies which show that about 100 degrees of necessary for most ADLs, but I don't know if I would consider an elbow which was normal to start with, and then had only 100 degrees of ROM satisfactory. Obviously too late to change this now, but would mention the following study regarding functional ROM of the elbow: J Bone Joint Surg Am. 2011 Mar 2;93(5):471-7. doi: 10.2106/JBJS.L.01633. Functional elbow range of motion for contemporary tasks. Sardelli M1, Tashjian RZ, MacWilliams BA.

We would like to thank the reviewer for their comments. The above paper was mentioned and commented in the manuscript.

2. Conclusion: I would reword this to emphasize the 3 week LOI following simple elbow dislocations

We would like to thank the reviewer for their comments. The 3-week LOI is now emphasized in the conclusion.

3. Core tip: based on the results of your study, it seems like 3 weeks if the cutoff, not 2-3 weeks.

We would like to thank the reviewer for their comments. 2-3 weeks is now changed to 3 weeks of immobilisation.

4. Intro: Any comments on pronation/supination needed for ADLs? Did you look at this?

We would like to thank the reviewer for their comments. We did not look at pronation / supination as a separate parameter, as patients with significant loss of pronation / supination also had a significantly limited arc of motion (i.e. less than 100°), a deficiency that was more prominent / troublesome than pronation / supination. However, PROMS would be able to give more information on this, a limitation that has been reported in the discussion.

5. Needs a hypothesis at the end of the intro

We would like to thank the reviewer for their comments. A hypothesis has been added at the end of the intro.

6. Please include a picture of a simple elbow dislocation and a complex

We would like to thank the reviewer for their comments. A picture of a simple and a complex elbow dislocation is included in the manuscript.

7. Methods: Lost the date and approval number for the IRB approval

We would like to thank the reviewer for their comments. These have now been added in the Methods.

8. Define inadequate follow up

We would like to thank the reviewer for their comments. Inadequate follow up is now defined in the text.

9. Results: 33 fractures? What kind of fractures?

We would like to thank the reviewer for their comments. We apologise for the typo mistake, this is now changed to “dislocations”.

10. Elaborate on the sport related injuries (what sport, mechanism, etc)

We would like to thank the reviewer for their comments. Sport related injuries have been elaborated.

11. Elaborate on how all of the dislocations were treated

We would like to thank the reviewer for their comments. A paragraph describing our protocol for treating elbow dislocations is added.

12. Do you feel you can reliably evaluate post-op ROM if Group 3 didn't come to their therapy appointments? Don't you think this kind of discrepancy would significantly effect the results? - certainly this is a limitation

We would like to thank the reviewer for their comments. As mentioned in the manuscript, the major cause of the prolonged immobilisation of patients in Group 3 was the lack of adherence to their scheduled outpatient trauma clinic appointments. Not surprisingly, this group of patients did not attend their physiotherapy sessions and in most cases the outcome was poor / unsatisfactory. Range of motion was documented during the last appointment. Time of follow-up of this group was longer than the other groups, even if this was not significant. We therefore believe that final ROM was evaluated as reliably as in the other groups.

13. Any comment on why some of the patients had CT, MRI, etc?

We would like to thank the reviewer for their comments. A comment on why some of the patients had CT/MRI is added.

14. Discussion: Please add in info about the sports related injuries in your patient cohort in the discussion section about sport injuries

We would like to thank the reviewer for their comments. A comment about sport injuries is added in the manuscript.

15. Agree with the cost difference explanation. Why would I expect the medical costs to be higher in the prolonged immobilization group?

We would like to thank the reviewer for their comments. A comment is added with regards to higher costs in the prolonged immobilisation group.

16. Conclusion: Conclusion in the paper should match the conclusion in the abstract

We would like to thank the reviewer for their comments. Conclusion in the paper now matches the conclusion in the abstract.

Reviewer: 3

Comments to the Author
excellent paper

We would like to thank the reviewer for their comments.

Reviewer: 4

Comments to the Author

Very well done and useful study, which contributes to existing literature on this subject and clearly tells us that an unnecessary and prolonged immobilization is not only harmful to the patient but the hospital economics, as well!

We would like to thank the reviewer for their comments.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the World Journal of Orthopedics.

Sincerely yours,

A handwritten signature in black ink, consisting of a large, stylized 'M' shape with a horizontal line underneath it.

Mr Michalis Panteli MD, MRCS (Eng)
Honorary Lecturer University of Leeds
Academic Unit of Trauma & Orthopaedics
A Floor, Clarendon Wing
Leeds General Infirmary