Peer Review File

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Reviewer A

I read and for the most part appreciated your contribution, since the issues have been laid out in an effective and scientifically sound manner. The methodology is sound, as far as I have been able to determine, although substantial limitations are evident, which, to be fair, have been summarized by you. However, it is to share your hypothesis regarding the fact that the success of surgery may also depend on the location of the ulnar osteotomy and well done in order to investigate whether the level of osteotomy is a potential risk factor for radial head rilussation. As you correctly stated and, in any case, known in the literature, the overall stability of the forearm depends on the integrity of the radioulnar joints, which include the proximal radioulnar joint (PRUJ) and the distal radioulnar joint (DRUJ).
The fact remains that the positive outcome is achieved by early diagnosis, achievement of anatomic reduction and optimal stabilization with internal fixation that will allow early functional recovery to be undertaken. Timely initial diagnostic framing, as indicated in an interesting paper that I would suggest you contemplate among your bibliographic references (DOI: 10.26355/eurrev_202306_32800), will allow planning an appropriate course of treatment, putting in place every preventive measure in order to contain the damage and limit the risk of even possible medico-legal litigation. Addressing these elements of discussion in detail would certainly help to make the article more complete, which would be advisable, since the article has qualities and strengths that make it an acceptable scientific research contribution.
Reply 1: Thank you very much for your suggestion, we have modified our text as advised (see line134-138)"
Changes in the text: “The diagnosis of Monteggia lesions is difficult and can't always easily be noticed especially when the radial dislocation is minimal and hidden by the more obvious ulnar fracture. Between 20% and 50% of Monteggia lesions are reported to be initially misdiagnosed, leading to chronic lesions, disabling sequelae and even potential medico-legal consequences.

Reviewer B

This is a case series of 18 patients with chronic Monteggia injury. The author attempted to look at the impact of the location of ulnar osteotomy on redislocation after surgical management of these patients. As mentioned by the authors and the systematic review by Tan et al. 2022, redislocation after surgical management of chronic Monteggia injuries is not uncommon and continues to challenge surgeons in the field. Although different factors have been associated with redislocation as mentioned in lines 166-168, it is important to differentiate casual vs. association to avoid adding to the confusion in

this field.
Unfortunately, this study is not adequately powered to make conclusions made by the authors. There are only 3 patients in the redislocation group which is an extremely number to confer that the location of the osteotomy is a causative factor for redislocation considering that there were 2 patients with “inappropriate PUO range” in each group. Moreover, baseline data regarding the degree of ulnar deformity is missing and it is possible that the redislocated patients had more deformity at baseline. Although the authors make a biomechanical argument for the appropriateness of the location of osteotomy between 1/5 and 1/3 of the ulna based on the effect of lengthening at the osteotomy, this presumes that these components of the IOM are intact in these injuries which recent biomechanical studies have brought into question and also ignores the effect of angulation of the osoteotomy on these structures. Finally, based on their predictive performance measure (table 3), final reduction was mostly predicted by angle and post-PUL. Although there is statistical power for these and the % of appropriate PUO, the number in the redislocation group is so small to know whether these results are valid. I think it is entirely reasonable to suggest this osteotomy location as part of a surgical technique paper, but the presented data does not support a conclusion that the osteotomy in this location will result in better outcome regarding maintaining the radial head in joint or that osteotomy outside this range will result in redislocation.
Thank you very much for your candid evaluation; all the shortcomings you mentioned are indeed present in this article. We hope that in future multicenter studies with larger sample sizes, our conclusions can be further substantiated.

Some specific suggestions are provided below:
1. Line 18: please clarify what angle you’re referring to in the abstract.
The “angle” means “ulnar osteotomy angle”. We apologize for our unclear expression. Thank you for your reminding. We have modified it in text.

2. I would suggest changing the group “in-location” to “reduced” vs. “rediclocated” groups.
Thank you for reminding. The term 'reduced' is considered more professional than 'in-location'. We have modified it in full text.

3. Line 47: what’s the authors definition of CMF, as 2 weeks would be too early for chronic and would be considered subacute
The Monteggia fracture in our center for more than 2 weeks will be defined as the CMF. Thank you for your reminder. I have further reviewed extensive literature and find it is considered more professionally apt to extend the timeframe to three weeks. We have modified it in text.

4. Line 90: change HME to MHE
Thank you for reminding, we have modified all the errors in the full text

5. Lines 264-266: Based on table 1, it appears that all patients received bone grafting.

Is that the preference of the author considering that proximal osteotomy has a good healing potential?

As we report in our article, the mean amount of ulnar lengthening was 9.78 ± 3.77 mm. With such a big gap, we think bone grafting is still necessary to accelerate bone healing though the proximal osteotomy has a good healing potential. So we prefer to take bone grafting during ulnar lengthing.