Peer Review File

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This manuscript gives descriptive information regarding the location of the sublime tubercle of the proximal ulna in an anterior-to-posterior plane with the idea that this information could be used in preoperative planning to restore kinematics in UCL reconstruction. I agree that this is useful information.

Comment 1: Abstract
Results (line 18-22): Is the angle and clock face based on the left or right elbow

Reply 1: Thank you for this inquiry. The angle and clockface are based on the right elbow. We have modified our text as advised (see Page 1, Lines 17-18).
Changes in text: All left elbow angle and clock-face values were converted to right elbow values for analysis.

Comment 2: Methods
Line 53: 25 seems like a small number of scans to use to characterize anatomy. What is the breakdown of inclusion/exclusion criteria of the scans? Total number of scans with intact elbows, number with fracture or surgical intervention, leaving 25.

Reply: Thank you for this comment. We have modified our text as advised (Page 3-4, Lines 54-70).
Changes in text: The University of South Florida Department of Radiology maintains an anonymized research database of medical image data. This data was collected under IRB approval for Human Subject Research following all ethical policies for patient data research. All scans were clinically ordered for diagnostic imaging as part of the patient's standard of clinical care and therefore, no individuals were subjected to any radiation for research purposes. These CT scans were then extracted without any patient health information (PHI), including age and sex, that were sourced from the hospital picture archiving and communication system (PACS) in Digital Imaging and Communications in Medicine (DICOM) format. Each CT scan was given a unique alphanumerical ID of 6 letter and/or numbers. A total of 91 CT scans were identified that included the anatomy of interest. Each dataset was screened for inclusion/exclusion criteria. Studies were included if the entirety of the proximal ulna was captured in the scan field of view (FOV). Scans were excluded if the ulna was only partially captured, if there was evidence of an unhealed or healed fracture, any surgical intervention, or identifiable pathology, including but not limited to arthritis, congenital malformation, or osteosarcoma. Sixty-six CT scans were excluded, and twenty-five elbows met criteria for analysis. These CT images were then imported into the Mimics Innovation Suite

24.0 (Leuven, Belgium) for morphologic analysis. IRB determined the study was exempt due to the de-identified nature of this study.

Comment 3: Figure 1: It is difficult to read the text. Consider putting a white box under the text or use another method to increase readability

Reply: Thank you for this comment. We have modified this figure to be more readable. A new figure 1 image has been uploaded.
Changes in text: N/A

Comment 4: Figure 2: 2A and 2B are not necessary. The red text over the red points is difficult to read. This is true for all subsequent figures

Reply: Thank you for this comment. We have removed Figure 2A and 2B and changed 2C as simply Figure 2. We have also increased the font on subsequent figures for easier readability. We modified our text as advised.
Changes in text:
"…(Fig.2)." Page 4, Line 87.
We eliminated the following: "…(Fig. 4a,b)." Page 4, Line 91.
"Fig. 5" to "Fig. 4" Page 5, Line 93.
"Fig. 6" to "Fig. 5" Page 6, Line 119.
"Figure 2 – A 3D reconstructed proximal ulna of a right elbow is shown with the following landmarks: midpoint of the trochlear notch (or centroid), the most superior point of the trochlear notch, and the most inferior point of the olecranon." Page 11, Lines 270-272.

Comment 5: Figure 4: I recommend eliminating this figure. Figure 5 is much easier to understand and has the same information

Reply: Thank you for this comment. Figure 4 has been eliminated and numbering for the figures has been adjusted accordingly. We modified our text as advised (Page 12, Lines 278-282).
Changes in text: "Figure 4 - A 3D reconstructed proximal ulna of a right elbow is shown demonstrating the measurement of the sublime angle from the midpoint of the trochlear notch along the central line to the sublime tubercle."

and

"Figure 5 - A 3D reconstructed proximal ulna of a right elbow is shown on top of a clock face to demonstrate the clock face conversion of the sublime angle."

Comment 6: Statistical Analysis: This section does not include a description of statistics.

It further explains the how the outcome measures were calculated.

Reply: Thank you for this comment. We have included the following statement (Page 5, Lines 101-102).
Changes in text: Microsoft Excel™ 2022 was used to calculate mean values, standard deviations, and ranges for continuous variables.

Comment 7: Results:
Line 94: This would be a good place to remind the reader that all elbows were converted to rights and explain what the angle/clock conversion would be for a left elbow.

Reply: Thank you for this comment. We have included the following statement (Page 5, Lines 111-112).
Changes in text: All left elbow angle and clock-face values were converted to right elbow values for analysis.

Comment 8: Discussion:
Line 124: you may not be able to make a direct comparison, but a statement as whether your data is completely different or of the same magnitude would be helpful

Reply: Thank you for this comment. We have included the following statements as advised (Page 7, Lines 146-149).
Changes in text: The mean distance from the midpoint of the trochlear notch to the sublime tubercle was 15.18±3.67 mm (range, 5.57-22.55). This distance is congruent in magnitude with the other studies measuring the sublime tubercle from both the coronoid tip and the posterior articular margin of the lesser sigmoid notch.

Comment 9: Line 151: This may be an overstatement. Within your 25 scans there was large variation in the distance from the medial aspect of sublime tubercle from midpoint of the notch. It is possible there would be larger variation if more scans from a mix of demographics.

Reply: Thank you for this comment. We agree with the reviewer that the variation in the 25 elbows was considerable. We have modified the text as advised (Page 8, Lines 176-179).
Changes in text: We eliminated the following statement: "However, the position of the sublime tubercle is unlikely to be significantly different among different demographics. Future studies could address the position of the sublime tubercle in throwers."

And

We included the following statement: Since there was a relatively wide range of sublime tubercle positions in our cohort of 25 elbows, there may be larger variance found in the population at large. Future studies could address the position of the sublime tubercle in

larger populations as well as throwers in particular."

Comment 10: Conclusion: Line 161: It should be explicitly stated that the 9-10 o'clock measurement is for a right elbow with a contralateral elbow being the left.

Reply: Thank you for this comment. We have modified our text as advised (Page 9, Line 190).
Changes in text: …on a right elbow….

Reviewer B

Well portrayed images, good foundation on this.

Reply: Thank you for this comment.
Changes in text: N/A