

# Posterior Displacement and Angulation of Displaced Lateral Clavicle Fractures: Letter to the Editor

## Dear Editor:

It was with great interest that I read the article “Posterior Displacement and Angulation of Displaced Lateral Clavicle Fractures: A 3-Dimensional Analysis” by Cho et al.<sup>1</sup>

Unfortunately, I disagree with the proposed description of fracture displacement. In the literature, the displacement of fractures is commonly defined in terms of the abnormal position of the distal fracture fragment in relation to the proximal bone. This means that in the case of clavicular fractures, the displacement of the distal (lateral) fragment of the clavicle is described in relation to the medial fragment. In the Cho et al<sup>1</sup> study, the displacement of the proximal (medial) part is described in relation to the distal (lateral) part. Thus, the title of this article can be misleading and confusing.

Also, this description can be confusing from a biomechanical point of view. In the standing position, because of gravity, the scapula has the tendency to go into internal rotation, downward rotation, and posterior tilt.<sup>2</sup> However, this is prevented by the strut function of the clavicle. When a lateral clavicular fracture occurs, this strut function can be lost, and the scapula, together with the lateral part of the clavicular fracture, will go into

internal rotation, downward rotation, and posterior tilt and will be anterior and inferior to the medial clavicular fragment. This displacement pattern also seems to be observed in the Cho et al<sup>1</sup> article and fits with the known biomechanics of the shoulder girdle. So, the proximal (medial) part of the clavicle does not displace but remains at its natural position, yet the distal (lateral) part displaces.

To conclude, I propose describing the displacement of lateral clavicular fractures as anterior and inferior displacement and angulation.

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## REFERENCES

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