



Letter to the Editor

Letter to the Editor concerning “Revisiting the Schatzker classification of tibial plateau fractures” by Kfuri M, Schatzker J. Injury. 2018 Dec;49(12):2252–2263



It was quite an interesting and enriching experience reading the article “Revisiting the Schatzker classification of tibial plateau fractures” by Kfuri et al. [1] It is very much evident from the recent literature that there is a need for an all inclusive and comprehensive classification for tibial plateau fractures, which is yet to be accomplished [2,3]. This article and through it the proposed classification is a wonderful attempt to simplify and provide an insight towards three dimensional categorization of tibial plateau fractures while merging the basics of time tested and universally used Schatzker’s classification. The methodology and its application is very well described. However, as readers, we feel the following points need addressing for better understanding and application of this classification system.

- 1 Virtual equator:** The concept of virtual equator advocated by the authors divides the tibial plateau into four quadrants which have visibly smaller posteromedial and posterolateral segments. The authors have assumed that the posterior extent of the medial collateral ligament insertion and anterior extent of lateral collateral ligament insertion can be located using CT or MRI pictures. We feel that there is considerable evidence to suggest that ligamentous injuries are frequent in tibial plateau fractures, and MCL and LCL injuries have been observed with the higher variants of schatzker classification [4]. When injured, these structured may not be well appreciated. Thus in such cases it may be difficult to mark such a virtual equator for the classification purpose. Secondly, unlike MRI, CT scan is the preferred radiological investigation in assessment of tibial plateau fractures and this may not be reliable tool for locating the extent of ligamentous attachments. Thirdly, the fractured segments in tibial plateau fractures are often displaced in high energy injuries which could create two non similar equators in reduced and unreduced positions which could result in higher interobserver variations.
- 2 Comminution:** At times there are fractures with such extensive comminution that the major fracture lines can not be easily identified. We feel that an additional label denoting the quadrant with extensive comminution will be more informative in planning fixation as well as in predicting prognosis. For example, as evident in the representation image (Fig. 1), the posterolateral quadrant is almost completely covered by peripheral thick part of lateral meniscus and thus any comminution in this region has less chances of hindering knee motion while, the anterolateral quadrant contains the uncovered articular surface of tibial plateau which remains in contact

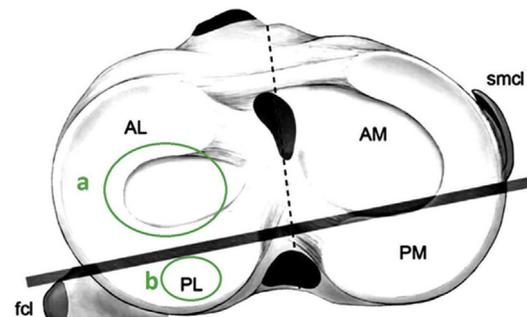


Fig. 1. A representational image of tibial plateau surface showing that two zones, ‘a’ in anterolateral quadrant and ‘b’ in posterolateral quadrant. Comminution in zone ‘a’ is more likely to affect the knee motion due to loss of congruence with femoral articular surface while the thick meniscal cover on zone ‘b’ will not be in direct contact with femoral articular surface and thus might not hinder knee motion as much as in zone a.

with the femoral condyles as well the thin inner part of lateral meniscus. Therefore, injury to the latter probably has more chances of affecting the knee motion in case of extensive comminution.

Although, the proposed classification is simplistic and takes into consideration a lot of factors but we would be glad if the authors could give their opinion on the raised points.

Conflict of interest

None of the authors have any conflict of interest to declare.

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Arvind Kumar
Aditya Jain

*Department of Orthopaedics, AIIMS, Ansari Nagar, New Delhi, 110029,
India*

Samarth Mittal*

*Department of Orthopaedics, JPN Apex, Trauma Centre, AIIMS, Ansari
Nagar, New Delhi, 11009, India*

Naveed Aga
Queen's Medical Centre, Nottingham, UK

* Corresponding author.
E-mail address: samarthmittal@gmail.com (S. Mittal).