Reviewer's report

Title: Intra-articular corrective osteotomy for malunited Hoffa fracture: a case report

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This case report described by Iwai et al. represented salvage corrective osteotomy for malunited Hoffa fracture. The manuscript was well-written, however, there were several points to be reconsidered, before the acceptance for publication.

Lateral subvastus approach was likely to be the best approach for such challenging operation. Please describe more detail of this approach, particularly regarding how to manage Gerdy’s tubercle. Liebergall et al. reported that advantages of Gerdy’s tubercle osteotomy for the treatment of lateral coronal fracture (J Orthop Trauma, 2000).

Please describe how the author decided the angle or length of wedge osteotomy before or during operation. Did the author check radiograph or CT of contralateral side ?. Please check condylar twisting angle (angle between posterior condylar axis and trans epicondylar axis on the axial plane) on preoperative CT images. According to Fig.1d, posterior condylar offset appeared to be increased due to malunion, and thus, condylar twisting angle would be much smaller than normal.

What is the reason why knee flexion angle was limited to 40 degrees preoperatively and dramatically improved to 145 degrees postoperatively, although manipulation had been performed in the previous hospital. Was increased posterior condylar offset at lateral femoral condyle one of the reasons, or was there another critical reason? Please discuss about it in the text. Is severely impeded flexion like 40 degrees explained by posteriorly displaced femoral condyle? (Discussion, lines 15-17)

Shearing force on the posterior femoral condyle is generally accepted as the etiology of Hoffa fracture. What is the mechanism explaining large depression of cartilage developed on the lateral femoral condyle. Please consider it from the perspective of etiology of Hoffa fracture.

The author described that the insertion of LCL was preserved. Please describe how the attachment of popliteus tendon is treated. Please depict these 2 attachments in Figure 3a or 3d.

Please discuss the incidence and mechanism of ACL injury associated with Hoffa fracture. There is a large difference between the etiology of ACL injury (i.e. conventional knee-in toe-out position) and that of Hoffa fracture.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable