

SURGICAL APPROACH IN A CASE OF AN UNCLASSIFIED COMPLEX ACETABULAR FRACTURE

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INTRODUCTION:

Acetabular fractures are classified based on Letournal and AO classifications. The commonly used surgical approaches are Kocher-Lengenback, Illofemoral and Illo-inguinal approaches, with their extensile subsets. This is a case report of a complex right hip fracture dislocation involving acetabular and iliac bone and discuss regarding surgical approach of an unclassified pelvic fracture pattern.

REPORT:

A 37 years old motorcyclist involved in road traffic accident colliding with a car from behind. He sustained closed right hip fracture dislocation with acetabular and iliac bone extension. A CT scan was done, which showed fracture acetabular (involved posterior and anterior wall) and the right ilium bone fracture (including ASIS, AIIS and undisplaced posterior column fracture) which was not been classified in AO or described how to approach surgically. In this case, we advocated a double approach for these types of fractures, which is Kocher-Lengenback and Illofemoral. Intraoperatively, patient was placed in left lateral position. An initial anterior Illofemoral approach was used, to address avulsed fracture from ASIS that extend to AIIS. The reduction of the anterior ASIS piece was difficult, however by dislocating the femoral head, the fracture was able to reduce well and a k wire size 2.0 mm was inserted through the anterior ASIS piece. The head was held in place via Cobbs. Once the head is immobilized, the reduction of the anterior piece was made possible. A pointed reduction forceps was used to reduce the anterior ASIS fragment. A 3.5mm recon plate was plated over the outer table of the right iliac crest to hold the anterior wall. However, by using this Illofemoral approach, we are unable to address the posterior wall and column of the acetabular fracture. The posterior Kocher -

Langerback approach was used. The posterior wall was reduced and plated using 2 spring plate and a recon plate.

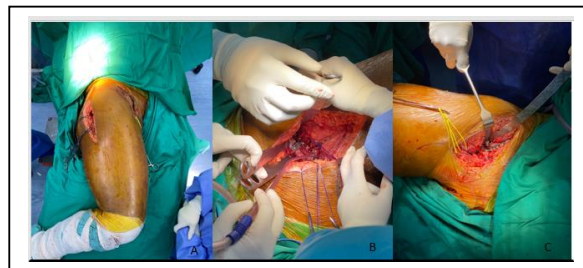


Figure A,B,C : Showing dual approach, posterior and iliofemoral approach respectively



Figure D,E : Both shows post operative images

DISCUSSIONS:

We believe this fracture pattern is not addressable with a single approach as the fracture pattern itself is undescribed and the anterior wall fracture piece was big. The advantages of this technique is, it done in single position hence no need for re-draping. It is wide enough to help in fracture reduction especially in this case.

CONCLUSION:

In cases of new type of fracture patterns, it may be necessary to use more than 1 approach.

REFERENCE

Herman A, Tenenbaum S, Ougortsin V, Shazar N. There Is No Column: A New Classification for Acetabular Fractures. J Bone Joint Surg Am. 2018Jan17;100(2):e8.doi:10.2106/JBJS.17.00600. PMID: 29342067.