

# Tricortical Iliac Graft In Complex Bicolumnar Acetabulum Fracture- A Case Report

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## INTRODUCTION:

Bicolumnar acetabulum fracture represents approximately 22% of all acetabulum fracture.(1)It is known as one of the most complex acetabulum fracture and it proves to be a huge challenge for the operating surgeon. Preservation of the native hip joint is still our primary concern. In this kind of cases, iliac strut graft proves to be an option with favourable outcome. (2,3)

## MATERIALS & METHODS:

A 22 years old gentleman was involved in a high impact motor vehicle accident and sustained a comminuted bicolumnar left acetabulum fracture. He underwent plating of the acetabulum with tricortical iliac bone graft using both ilioinguinal and also Kocher-Langenbeck approach.

## RESULTS:

At 6 month post surgery , x rays shows evidence of union. Patient is also able to ambulate pain free, squat and perform prayers in a normal manner. The clinical scoring system using modified Merle d'Aubigne and Postel score at 6 month shows excellent result for this patient.

## DISCUSSIONS:

In a severely comminuted medial wall like in our case, some of the bone pieces were not amenable to any form of fixation. Tricortical iliac bone graft proves to be a good option in reconstructing the medial wall as it can be shaped to fit the defect and a quadrilateral plate was used to buttress it.

**Figure 1: Pre op Xray and x ray taken at 6 months post op**

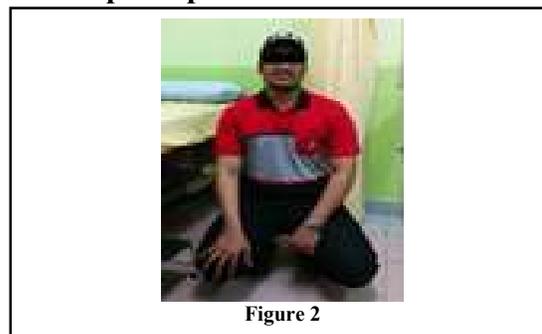


Figure 2

**Figure 2: Patient able to squat at 6 month post op**

## CONCLUSION:

Excision of the comminuted fracture fragments and augmenting the medial wall with a tricortical iliac bone graft gives an excellent outcome in a comminuted bicolumnar acetabulum wall fracture.

## REFERENCES:

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3. Gupta S, Mittal N, Virk JS. Use of tricortical iliac crest strut autograft in comminuted posterior wall acetabular fractures: A case series. *Chin J Traumatol*. 2017;21(1):58-62.

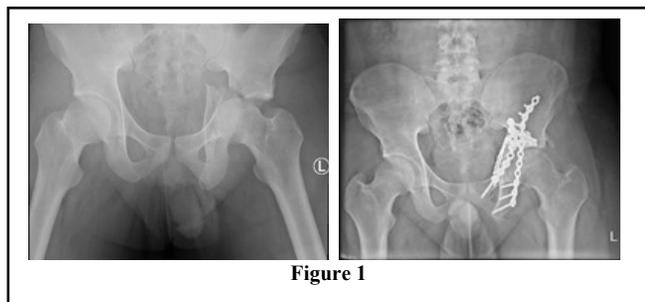


Figure 1