

## Thinking Outside the Box: Modified Gibson with Ganz Trochanteric Osteotomy for Improved Exposure in Hip Fracture-Dislocation Surgery - A Case Report

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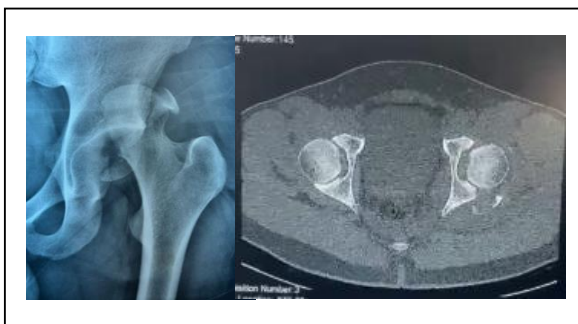
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### INTRODUCTION:

Fracture-dislocation of the hip is a very severe form of pelvic injury. It may be associated with the femoral head (FH) and acetabular wall (AW) fracture. Approach to this complex pelvic fracture can sometimes be challenging. We present a case of hip dislocation with FH and AW fracture using Modified Gibson and Ganz Trochanteric Osteotomy approach in our centre.

### REPORT:

A 23-year-old guy who was a motorbike rider collided with a car. Post-trauma, he had severe left hip pain and could not ambulate. A pelvic radiograph shows left hip was dislocated with FH and posterior AW fracture. During closed manual reduction (CMR), noted the hip joint was unstable and easily dislocated after the CMR. We proceed with computed tomography (CT) scan pelvis to assess the injury further. The CT images showed Pipkin type 4 injury with oblique fracture inferior fovea left FH, comminuted posterior left AW fracture with multiple small fragments inside the joint. This patient has undergone an operation with a Modified Gibson and Ganz Trochanteric Osteotomy approach was used to address the fracture.



**Fig. 1: Pre-operative images showed dislocated left hip with fracture FH and posterior AW**



**Fig. 2: Intra-operative image - oblique fracture of the left FH**



**Fig. 3: Left hip post-operative radiograph**

### CONCLUSION:

In high-energy trauma, posterior hip dislocation highly associated with AW fracture. FH fracture further compromised the hip joint stability. Thus, operative treatment is mandatory to restore joint stability. The Ganz Trochanteric Osteotomy through the modified Gibson approach of the hip is one of the versatile approach nowadays. The main advantage was to fix both parts of fractures simultaneously in a single incision. We believe this technique is a promising and safe procedure for treating hip fracture-dislocations.

### REFERENCES:

1. De Mauro et al. Gibson approach and surgical hip dislocation according to Ganz in the treatment of femoral head fractures. BMC MusculoskeletDisord 22 (Suppl 2), 961-2021