

Single Surgical Approach With Screw Fixation For A Complex Pelvic Fracture

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INTRODUCTION:

Pelvic fractures are serious injuries that can lead to severe morbidity. The management of such fractures often requires surgical intervention to restore stability and early return of function. Our case report highlights the case of a 36 years old female who sustained a complex pelvic fracture and was treated using single-approach surgery with screw fixation.

REPORT:

A 36 year old lady was involved in motor vehicle accident sustained fracture over right iliac bone, right superior pubic rami fracture and right sacroiliac joint disruption. Patient was stable and Pelvic CT-imaging of pelvic was done for surgical planning.

Her operation was done on post-trauma day 10. Intraoperatively, she was positioned supine. Using only the lateral window of ilioinguinal approach to address and reduce fractures, traction over right lower limb was applied to realign the fractured segments over sacroiliac joint until achieved anatomic reduction. Temporary fixation was achieved using Kirschner wires. After that a guide pin was placed into the S1 and S2 vertebra body under fluoroscopic guidance. Partially threaded lag screw was inserted through the guide pin into the right iliosacral S1 and S2 region to stabilize the sacroiliac joint. Using same approach additional screws were placed in the right superior pubic rami and iliac bone to achieve further stabilization. The incision sites were closed in layers after confirming adequate fixation through fluoroscopy. She was started physiotherapy within 24 hours post-surgery. The wound healed after two weeks with a good range of motion over right hip with minimal pain and she was advised to gradually increase weight-bearing activities over three months.

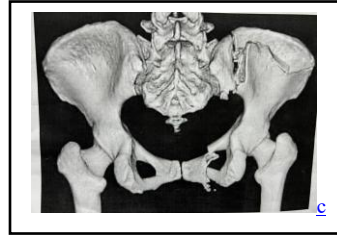


Figure 1: 3D-CT (posterior view)



Figure 2: Pelvic Xray (Post operative)

CONCLUSION:

The single-approach with screw fixation for complex pelvic fractures showed its potential benefits in reducing surgical trauma, shorten the surgery time and improving recovery time of the patient.

REFERENCES:

1. Atul P et al. "A Single Approach for Management of Fractures Involving Both Columns of the Acetabulum, 2021.