

Primary Total Hip Arthroplasty with Restoration Gap II Cage Post Fracture Dislocation of Femoral Head and Neck with Acetabulum Fracture

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INTRODUCTION

Fractures of the femoral head infrequently accompany hip dislocations with acetabulum fracture, but create complex therapeutic dilemmas. The injury is likely due to high-energy trauma during a motor vehicle accident in a younger subject. The combination of both injuries results in joint stiffness and osteoarthritis.¹

CASE

Mr. L, 67 year-old laborer was involved in road traffic accident. He sustained closed fracture dislocation of left femoral head and subcapital neck of left femur fracture associated with posterior wall of acetabulum fracture.



FIG.1: PREOPERATIVE Primary total hip replacement with restoration Gap II cage was done and postoperative was uneventful

DISCUSSIONS

Mr L. sustained Thompson-Epstein type V (Pipkin subtype IV) injury of the left hip. Treatment options include 1) Open reduction, screw fixation of femoral head and neck with plating of acetabulum 2) Hemiarthroplasty with plating of acetabulum 3) Primary total hip arthroplasty with restoration cage.² Zehi K. et. al noted surgical treatment with screw fixation, excision of fragment or prosthetic replacement had satisfactory functional results after mean follow-up of five years.³

Guan H. et. al used titanium cannulated screws to fix the femoral intertrochanteric

fracture in Pipkin IV patient. One case had necrosis of femoral head after 1 year of reduction and fixation, and received total hip replacement.⁴ Dreinhöfer KE et. al treated Pipkin IV fracture with primary total hip arthroplasty with good outcome.⁵ Schmidt AH et. al noted that recent comparative follow-up studies have documented superior and more durable function in patients with displaced femoral neck fractures after total hip replacement when compared to hemiarthroplasty or uncomplicated osteosynthesis. Economic analyses suggested that the long-term cost of treatment favors total hip replacement due to additional cost of treating failures of internal fixation and hemiarthroplasty in patients who survive 2 years or longer after their initial hip fracture.⁶

CONCLUSION

Primary hip arthroplasty is a reasonable treatment option with functional and financial advantage for fracture dislocation of femoral head/neck with acetabulum fracture

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