

‘Fanned Out: Avulsed Short External Rotators In A Case of Posterior Hip Dislocation with Acetabulum Fracture’

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INTRODUCTION:

Traumatic posterior hip dislocation is commonly known to be associated with fracture of the posterior wall of acetabulum.

However, incidence of concomitant avulsion of the short external rotators of the hip has been scarce.

REPORT:

A 27-year-old male was involved in motorvehicle accident and sustained left posterior hip dislocation. Closed manual reduction under sedation was successful but it was unstable. Both pre and post reduction, patient did not suffer any neurovascular deficit. CT pelvis showed left posterior acetabular wall fracture with intra-articular fragments.

Subsequently, patient underwent open reduction and plating of the left acetabulum via posterior approach. Intraoperatively, it was discovered that the short external rotators (*piriformis*, *superior gemelli*, *obturator internus* and *inferior gemelli*) was avulsed in whole from its site of origin.

The acetabular wall fracture was fixed using combination of spring plate and reconstruction plate.

Upon follow up at 1 year, patient was able to ambulate well without aid with no residual hip pain and no radiographic evidence of hip avascular necrosis.



Figure 1: Anteroposterior view of pelvis plain radiograph- pre and post operative

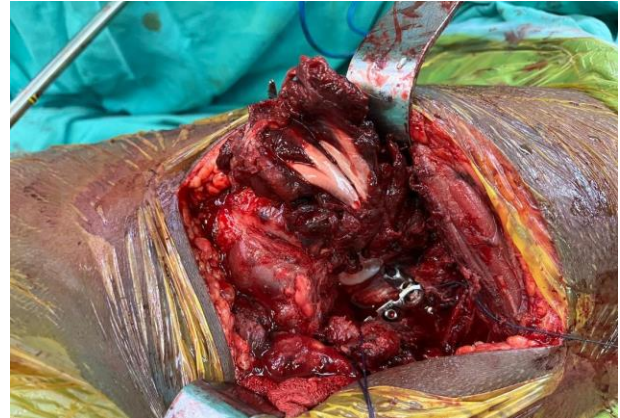


Figure 2: avulsed short external rotators, flipped anteriorly

CONCLUSION:

According to Laorr et al.¹, involvement of the external rotator group should be suspected in patients with posterior hip dislocation. These muscles lie adjacent to the dorsal aspect of the joint, making it prone to injury such as strain, tear, or rupture. Furthermore, the dorsal displacement of the head of the femur exerts an enormous tensile force particularly on the obturator internus and gemelli muscles.²

A better understanding of the overall nature of these injuries would aid surgeons in advising patients on prognosis and expected recovery.

REFERENCES:

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