

Near Miss Pipkin Type 3 Hip Fracture Dislocation in Adolescent -A Lesson Learned

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INTRODUCTION:

A Pipkin fracture is a traumatic hip dislocation with concomitant femoral head fracture. Literatures report 5-15% of incidence among all posterior hip dislocations.¹ Meanwhile, Pipkin type 3, which has associated femoral neck fracture, account for rarest type among all Pipkins, and the worst outcome that may necessitate hip replacement.¹ We hereby describe our experience with one near miss Pipkin type 3 hip fracture dislocation in a youngster.

REPORT:

An 18-year-old boy sustained left hip injury after alleged motorvehicle accident. He showed left lower limb sciatic nerve injury, and pelvic radiograph demonstrated neck of left femur fracture (Figure 1). Patient was put on lower limb traction, scheduled for cannulated screw fixation.

However, when patient was ready on traction table for reduction under image intensifier, we discovered femoral head was eccentrically seated from joint. Upon cross hip lateral view, surgeon was surprised to see a posterior dislocated femoral head and had to reposition patient for posterior hip approach. We discovered infra-fovea femoral head fracture with concomitant subcapital neck of femur fracture (Figure 2). Larger femoral head piece dislocated posteriorly, causing posterior hip capsule and superior external rotator muscles severely torn and contused. Femoral head was fixed with a 4mm cancellous screw. The femoral neck was fixed with two 6.5mm cannulated screws.

DISCUSSION:

Proper pelvic radiograph examination is crucial for all hip injuries. Whenever possible, get proper cross table lateral hip view or even computed tomography (CT) scan especially in highly suspected case. In this case, hip joint is

not congruent, and significantly narrowed compared to contralateral hip. Further workup and preparation could have been done prior to operation.

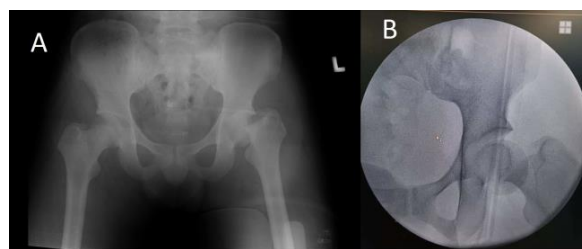


Figure 1: (A) Preoperative: Pelvis, (B) Intraoperative: left hip

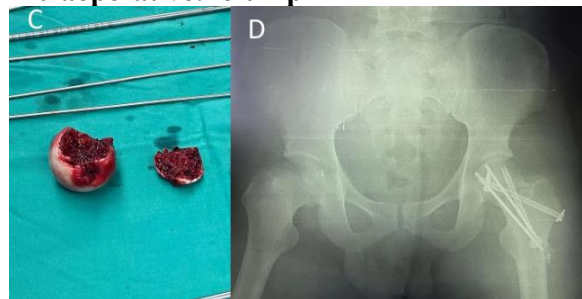


Figure 2: (C) infra-fovea femoral head fracture, (D) Postoperative xray

CONCLUSION:

Pipkin type 3 fractures are rare and have a very poor prognosis. A high index of suspicion and proper imaging is required when managing these fractures to ensure optimum treatment for the patients

REFERENCES:

1. Enocson, A., Wolf, O, Pipkin fractures: epidemiology and outcome. *Eur J Trauma Emerg Surg* 48, 4113–4118 (2022)