Developmental Dislocation of Hip Misdiagnosed as Traumatic Posterior Hip Dislocation

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ABSTRACT

A 47-year-old woman was presented to the emergency department. The limb of the patient was shortened, and her hip was mildly flexed, adducted, and internally rotated. Initially, the patient was misdiagnosed as posterior hip dislocation. However, after careful history taking and radiologic evaluation, her final diagnosis was developmental dysplasia of hip, which was a sequelae of poliomyelitis.

KEYWORDS: Posterior hip dislocation; Dysplasia of hip

CASE

A 47-year-old woman was presented to our emergency department via another hospital. She fell down from five-meter height at a mountain. Immediate orotracheal intubation was performed due to decreased mentality caused by acute SDH and SAH. The medical document from previous hospital noted failed manual reduction of left hip. The external appearance of the patient’s left lower limb was shortened, and the hip was mildly flexed, adducted, and internally rotated. The patient’s family reported that she had sown limping gait since early childhood due to poliomyelitis, and her status of hip joint had never been diagnosed with radiologic examination. Anteroposterior pelvic radiograph showed dysplastic acetabulum and high dislocation of the left femoral head, and a scant sclerotic iliac portion which can be suspected as false acetabulum (Figure 1). The 3 dimensional CT scan of the pelvis clearly shows the articulation of left femoral head with false acetabulum in the ilium (Figure 2). Subtracting femur from the CT scan, false acetabulum in the ilium has a round and deepened articulating surface (Figure 3).
DISCUSSION

A shortened limb with adduction, internal rotation, and flexion of the hip joint is a typical presentation of posterior hip dislocation in trauma patients. However, developmental hip dislocation is a common complication in polio patients, and other various conditions can also cause developmental hip dislocation. If a patient has a history of limping gait since early childhood, congenital or developmental dysplasia of the hip should be suspected, and careful radiologic evaluation is important to prevent misdiagnosis.¹ ²

# Conflict of Interest Statement

None of authors have a conflict of interest.

Figure 1. AP pelvic radiograph shows dysplastic acetabulum and superior migration of femoral head mimicking traumatic hip dislocation

Figure 2. CT scan of pelvis shows articulation of the left femoral head with false acetabulum in the ilium more clearly (A) Antero-posterior view, (B) Postero-anterior view.

Figure 3. Left lateral view of a CT scan of the pelvis bone shows round and deepened false acetabulum in the ilium.
REFERENCES
