Double Trouble: A Case Of Bilateral Anterior Hip Dislocation With Underlying Avascular Necrosis

Shamsul SA, Hafifi M, Ramanand A
Department of Orthopaedic & Traumatology, Hospital Sultanah Aminah, Persiaran Abu Bakar Sultan, 80100 Johor Bahru, Malaysia

INTRODUCTION:
Very few cases of post-traumatic anterior hip dislocations have been reported. The bony pelvis is intrinsically stable; hence a high impact trauma would be required to cause the above mentioned dislocations. This too with concomitant fractures around the pelvic region and associated intra-abdominal injuries. We present a case of traumatic bilateral anterior hip dislocation.

CASE REPORT:
A 43-year-old male presents to our Emergency Department post-motor vehicle accident with both his hips were abducted, flexed and externally rotated with intact neurovascular status. Plain antero-posterior (AP) pelvic radiograph revealed bilateral anterior hip dislocation (Figure 1). Closed manipulative reduction was performed with propofol as sedation. Both hips were reduced easily and uneventfully (Figure 2). Post-reduction both hips were stable. Subsequently, a Computed Tomography (CT) scan of the pelvis revealed an associated right anterior inferior iliac spine fracture, a right acetabular and left greater trochanter fracture with presence of bilateral avascular necrosis (AVN) of the femoral head. Fractures were treated conservatively with traction for two weeks in the ward. The patient was discharged with wheelchair mobilization. Four-months post-trauma the patient was walking unaided. However, there was decreased range of motion of his right hip. Plain pelvic radiograph showed worsening avascular necrosis of the right head of femur. On further questioning, he revealed chronic consumption of alcohol but was unable to quantify.

DISCUSSIONS:
Traumatic bilateral anterior hip dislocations are very rare and reported cases are usually associated with fractures of the femoral head or acetabulum. Prompt reduction is important to avoid avascular necrosis of the femoral head and as in our case, the use of propofol as sedation in the Emergency Department provided adequate sedation (Chiu, Ng, Wazir, & Bhruhanudeen, 2015) for reduction and did not need general anaesthesia. However, interestingly in our case, the patient has already had early changes of bilateral avascular necrosis of the femoral head prior to the injury. Weight-bearing ambulation may have been delayed due to the underlying AVN also present. Others reported weight-bearing as early as two-months (Karaarslan, Acar, Karci, Sesli, & Report, 2016).

CONCLUSION:
Bilateral anterior hip dislocation is a rare entity and majority of cases are due to high energy trauma cause by motor-vehicle accidents. Our patient’s hip dislocation together with his concomitant fractures were treated conservatively with an acceptable outcome.

REFERENCES:

Figure 1 AP pelvic radiograph pre-reduction

Figure 2 AP pelvic radiograph post-reduction