



Bilateral simultaneous traumatic hip dislocation in opposite directions A case report

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Bilateral traumatic hip dislocation is rarely seen. A patient who presented with simultaneous dislocation of both hips in opposite directions is presented in this case report.

A 42-year-old female patient who was injured in a motor vehicle accident as a passenger was brought to the emergency department and was diagnosed with posterior fracture dislocation of the right hip and anterior dislocation of the left hip. Both hips were reduced under general anaesthesia by closed manipulation, and reduction was confirmed with computerized tomography. No skeletal or skin traction was applied. Hip range of motion exercises were begun immediately. The patient was mobilized at the end of the sixth week and returned to daily activities without any complaint at the end of 16th week.

Keywords: bilateral hip dislocation ; closed reduction ; motor vehicle accident.

following a motor vehicle accident in which she was involved as a passenger.

CASE REPORT

A 42-year-old female patient injured in a motor vehicle accident as a passenger was brought to the emergency trauma department approximately two hours after the accident. She was conscious ; her blood pressure, respiratory rate and peripheric pulses were normal. Her left hip was abducted, flexed and externally rotated whereas her right hip was in adduction-flexion-internal rotation posture. Radiographs of the pelvis revealed posterior dislocation of the right hip and anterior dislocation of the left hip (fig 1). Computerized tomography examination in the emergency department demonstrated an

INTRODUCTION

Traumatic dislocation of the hip is generally caused by high-energy trauma. Bilateral hip dislocation is rarely seen and accounts for only 1-2% of all traumatic hip dislocations (4). Simultaneous traumatic dislocation of both hips in opposite directions – one hip anteriorly and the other posteriorly – is even rarer. In this case report we present a 42-year-old female patient who suffered anterior dislocation of the left hip and posterior dislocation of the right hip with associated fracture of the right femoral head,

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Fig. 1. — AP radiograph of the pelvis at presentation showing posterior fracture dislocation of the right hip and anterior dislocation of the left hip.



Fig. 3. — AP radiograph of the pelvis at 4 months, at which time full weight bearing was allowed. Hip joints appear completely normal.



Fig. 2. — Postreduction coronal CT section showing that both hips are anatomically reduced and the right femoral head has a Pipkin type 2 fracture.

associated fracture of the right femoral head, type 2 according to Pipkin's classification (fig 2). The right hip dislocation was type 5 and the left hip dislocation was type 2 according to the Thompson and Epstein classification (3).

Both hips were reduced under general anaesthesia under fluoroscopy. The range of motion and stability were assessed for both hips after reduction. Post-reduction CT examination showed that the femoral heads were concentrically reduced in the

acetabula and the fragment in the right femoral head was not displaced (fig 2). Post-reduction neurological examination did not demonstrate any motor weakness or loss of sensation. Neither skin nor skeletal traction was applied. Active range of hip motion exercises were begun at the end of the third week. The patient received indomethacin for 3 months to prevent heterotopic ossification. Following x-ray and CT examination at the end of the sixth week, partial weight bearing was allowed, and full weight bearing was allowed at the end of the eighth week (fig 3). At the end of the 16th week the patient was able to perform all daily activities without any complaints in either hip. She did not report any complaints when last seen 12 months after the injury, and the range of motion of both hips was normal.

DISCUSSION

Bilateral traumatic hip dislocations are infrequently seen; they represent 1.25% of all hip dislocations (1). Both hips are dislocated posteriorly in 50% of bilateral hip dislocations, one hip anteriorly and the other posteriorly in 40% and both hips anteriorly in the remaining 10% (2).

Our patient presented with type 5 dislocation of the right hip and type 2 dislocation of the left hip according to Thompson and Epstein classification.

Type 5 fracture dislocations of the hip are rarely seen, making up only 7% of all traumatic hip dislocations. It can be assumed that the patient received direct trauma to both of her knees while her right hip was adducted, flexed and internally rotated and her left hip was abducted, flexed and externally rotated, thus causing posterior dislocation of the right and anterior dislocation of the left hip (5).

Although surgery or prolonged traction are usually advised for the treatment of femoral head fractures associated with hip dislocations, we believe that satisfactory results can be achieved through early passive range of motion exercises followed by active range of motion exercises in the third postoperative week in cases in which anatomical and congruous reduction is confirmed by plain radiography and computerized tomography following reduction under general anesthesia (6). The main concept in traumatic hip dislocations is early reduction, in order to prevent avascular necrosis of the femoral head (7).

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