TRAUMATIC OPEN POSTERIOR DISLOCATION OF THE HIP: CASE REPORT

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SYNOPSIS

A case report of a patient with traumatic open posterior dislocation of the hip, who was followed up for a period of one year since the injury was presented. Open (Compound) anterior dislocation of the hip has been reported in the literature. (1, 2) But, to the best of our knowledge, no case of open posterior dislocation of the hip has been documented previously.

CASE REPORT

K.G.K. was a fifty nine year old Chinese maid who was trying to open the gate of the house, inorder to enable her employer to drive out onto the road. The gate was at the bottom of a steep hill and the distance between the garage and the gate was about 25 meters. The driver was reversing downhill-freewheeling. The patient was trying to open the latch at the bottom of one half of the gate. Her posture was such that both hips were flexed as she was stooping down in a semi squatting position. The main impact was on the right side of her head and leg. Though the patient could not remember the mode of impact, she woke up from under the car, which was confirmed by the employer.

On admission to the hospital, she was conscious and rational, not in shock, and has sustained the following injuries:-

(1) Cerebral concussion with peri-orbital haematoma and right frontal ecchymosis. No visual disturbances.
(2) A 3 cm clean, deep laceration of the right buttock overlying a bony swelling, which clinically was the dislocated head of femur. The right lower limb was shortened, with the hip held in mild flexion but almost neutral position. There was no clinical evidence of sciatic nerve injury.
(3) Minimal pubic tenderness, with clinical diastasis of the symphysis pubis. There was no evidence of urethral injury.

Radiology revealed the following injuries:-

(1) Post iliac dislocation of the right hip.
(2) Bilateral fractures of the superior and inferior pubic rami.
(3) Diastasis of the symphysis pubis. (About 5 cm).

The patient was started on Ampicillin 500 mg., and Cloxacillin 500 mg. six hourly intravenously; and an emergency exploration, wound toilet and reduction of the hip were done within six hours of the injury (Figure 1). The edges of the wound were excised, and the wound extended to provide access to the hip. The gluteal muscles were found contused and the head of the femur was found posterior to the belly of the obturator internus, and the superior and inferior gemelli. The muscles were found torn at the musculotendinous junction, and the sciatic nerve was found anterior to the belly of the short rotators (Figure 2). The nerve was found to be bruised, but intact. The posterior capsule was torn completely. The piriformis was intact. The acetabulum was intact without any intra articular loose bodies. The ligamentum teres was atrophic, and was excised. Wound toilet was done, and the femoral head reduced. The hip was found to be stable following the reduction. The capsular tear was not closed due to the nature of the tear. The short external rotators were sutured using braided polyamide, and the rest of the wound closed in layers, leaving a vacuum drain.

Post-operatively, the patient was nursed in a pelvic hammock. The diastasis of the symphysis publis reduced to 2 cm from 5 cm radiologically. On the second post-operative day, the patient developed blisters and

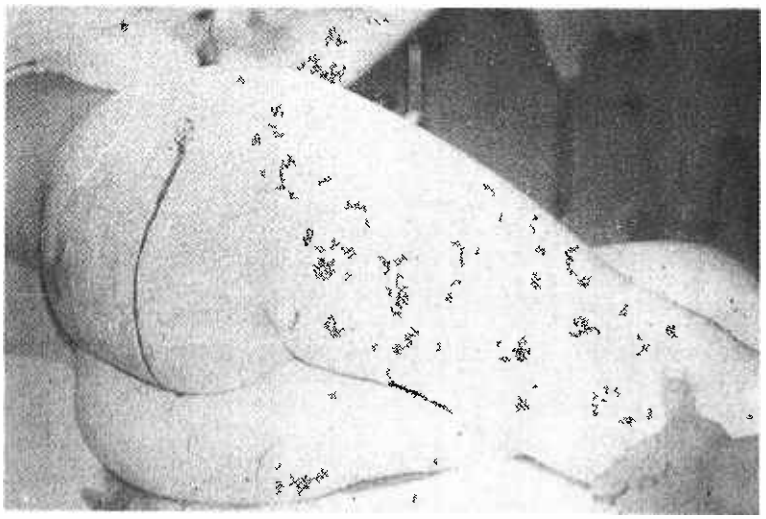

Figure 1 Patient positioned pre-operatively, showing cm laceration, with blood dripping from lower end of wound.

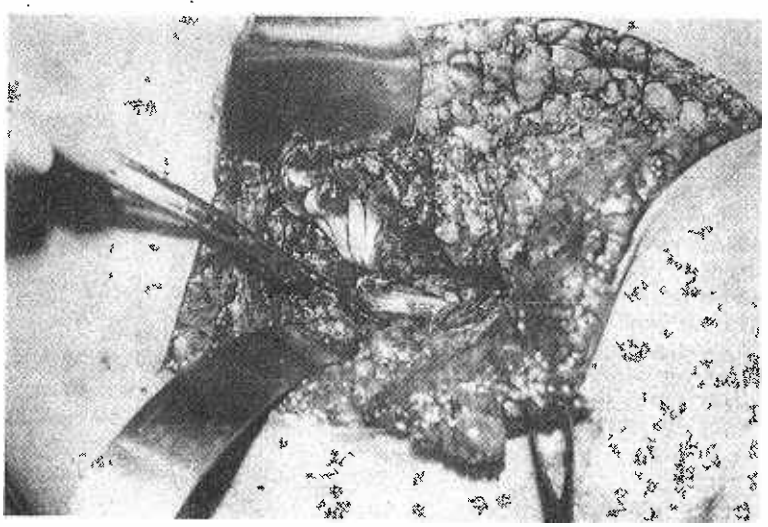

Figure 2 Shows contused sciatic nerve, with torn short external rotators lying posterior to the nerve (reflected to show musculo tendinous junction).

superficial pressure ulceration with sepsis. The hammock was discontinued, and the patient was nursed on the side. The blisters healed within the next ten days. She was also noted to have grade 4 weakness of the dorsiflexors and peronei on the third post-operative day, with sensory dimunition in the distribution of the common peroneal nerve; and both recovered by eight weeks following surgery. Ambulation was begun at eight weeks with the aid of a frame. She was discharged at eleven weeks after surgery to be followed up at the Outpatient's clinic. She progressed to ambulation with one stick at sixteen weeks, and resumed her duties as a maid. Thirteen months following the injury, she was ambulant without any aid and had no symptoms. But on questioning, she did have an occasional ache in the pubic region, on squatting for more than five minutes, which disappeared on standing. She had one cm true shortening of the right lower limb. Flexion of the right hip was equal to that of the left. But abduction and internal rotation was fifteen degrees less than the left. She had no disability. There was no radiological evidence of avascular necrosis of the femoral head, or secondary arthritis.

DISCUSSION

The compound wound could either be associated with the posterior dislocation of the hip or caused by it. The mechanism of injury suggest that the patient sustained the dislocation, followed by a compound wound in direct relationship to the dislocated femoral head. Open dislocations of the hip are very rare. Open anterior dislocations had been reported previously (1, 2, 3). To the best of our knowledge, traumatic open posterior dislocation of the hip has not been documented previously. THis case is of interest as the operative findings showed the pathogenesis of the dislocation and the distorted anatomical relationships.

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