Dislocation of the hip and ipsilateral femoral neck fracture

Irfan ESENKAYA (1), Mücahit GÖRGEÇ (2)

(1) İnönü University, School of Medicine, Department of Orthopaedics and Traumatology, Assoc. Prof., Malatya, TURKEY
(2) Haydarpasa Numune Hospital, Department of Orthopaedics and Traumatology, Assoc Prof., Istanbul, TURKEY

Correspondence:
Irfan ESENKAYA, Assoc. Prof., University of İnönü, School of Medicine, Dept. of Orthopaedics and Traumatology 44065-Malatya-TURKEY
E-mail: iesenkaya@hotmail.com

Abstract
Traumatic anterior hip dislocation with accompanying fracture of the neck of the femur is a rare injury. This is a report of such an injury that was treated with primary uncemented total hip replacement.

Résumé
La luxation antérieure traumatique de la hanche associée à une fracture du col fémal est une lésion rare. Nous rapportons une telle lésion qui a été traité par une prothèse totale non cimentée.
Introduction
Anterior dislocation of the hip with an associated fracture of the femoral neck is rare [2, 5, 8, 12]. Epstein mentioned that the most important factor creating the anterior dislocation of the hip is forcible abduction, in this position the neck or trochanter then impinges on the rim of the acetabulum, which tends to force the femoral head forward through the anterior capsule. If the hip is in a concomitant position of flexion, an obturator dislocation may occur. If the hip is extended, a pubic type results [3]. If the force is not dissipated, then it causes a complete break in the continuity of the neck [12].

Case-Report
A 39-year-old housewife was admitted in July 1996, having been involved in an automobile accident. On examination she was unable to move her legs, which were rotated laterally. Roentgenographic examination showed an anterior dislocation of the left hip with a subcapital fracture of the femoral neck (Figure 1), and a comminuted right femoral fracture. On the CT scan the femoral head was seen dislocated anteriorly and lying near the region of the obturator foramen (Figure 2). A lateral incision was used. The head and part of the neck fragment was found in the anteromedial portion of the acetabulum and was lying close to the obturator foramen. The articular surface of the femoral head showed some chondral defect. An uncemented total hip arthroplasty was performed. Reduction and fixation of the comminuted diaphyseal fracture of the right femur was accomplished with the use of a locked intramedullary nail. The postoperative course was uneventful. On the last follow up five years postoperatively she had no restriction of her daily normal functions.

Discussion
Posterior dislocation of the hip associated with a fracture of the femoral head [4, 6, 10] and neck [2, 6, 7, 9] is unusual but not rare. However, anterior dislocation of the hip with associated fracture of the femoral head [1, 3, 8, 11, 13] or neck [2, 5, 8, 12] is less common. Hart reported a fracture of the femoral neck associated with an antero-inferior dislocation of the hip, which was treated with Whitman reconstruction procedure [5]. Sadler and DiStefano reported an anterior dislocation of the hip with an ipsilateral basocervical fracture, which was reduced and fixed with a hip screw and plate. Unfortunately their patient developed avascular necrosis [12], which was treated with pedicle grafting. McClelland et al. reported another case with dislocation of the obturator type with ipsilateral fractures of the femoral head and neck treated with a collarless press-fit bipolar prosthesis [8]. Dümmer and Sanzana reported a similar case associated with subcapital fracture, which was treated by an uncemented total hip arthroplasty [2]. In our case, the fragment of the head and the neck was small (subcapital fracture). The articular surface of the head had chondral defects. We therefore performed an uncemented total hip arthroplasty.
Legends

Figure 1: Radiograph of the pelvis with anterior dislocation of the left hip associated with a subcapital femoral neck fracture.
Figure 2: CT scan shows hip dislocation of the obturator type. The femoral head is close to the region of the obturator foramen.
References


