# Femoral Head And Neck Fractures On The Same Side Without Hip Dislocation

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#### **Abstract**

Concomitant femoral head and neck fracture are usually associated with hip joint dislocation. The authors report a case of femoral head and neck fracture without hip dislocation.

### INTRODUCTION

Ipsilateral femoral head and neck fractures are uncommon. Usually these lesions are associated with hip dislocation [5]. In this manuscript, femoral head and neck fracture occurred without hip dislocation.

### **CASE REPORT**

A 52-year old man was victim of a traffic accident. He was driving a vehicle when it collided with another car. He suffered a dashboard injury. At the admittance in the hospital, the patient suffered from severe pains and functional disability of the left leg.

Examination showed opening cutaneous in a left thigh and external rotation of the member.

X-rays and pelvic computed tomography showed the following:

**Figure 1**Figures 1 and 2: femoral head fracture with multiples fragments





Figure 2
Figure 3: femoral basicervical neck fracture



Figure 3

Figure 4: Supracondylar femoral fracture with multiple fragments



Therefore, our patient presented with ipsilateral femoral head and neck fractures with opening supracondylar fracture (Gustilo 2). There was no hip dislocation.

Emergent debridement was performed on the open fracture and skeletal traction applied with a calcaneum pin. Hip surgery (total hip arthroplasty) is delayed because of the open supradondylar fracture.

#### **DISCUSSION**

Traumatic injuries of the hip joint are increasing in number because of traffic accidents [1]. They are hip dislocations, dislocations fractures, and acetabular fractures. The lesions depend on the speed and direction of the injuries forces but also to the position of the hip at the time of impact. The position of the hip such as adduction, flexion and rotation determines if the hip dislocates with or without fractures. The fractures can concern femoral neck, femoral head, greater trochanter, or posterior wall of the acetabulum. Hip dislocations associated with fractures have been described by many authors [2,7,8,10].

Rarely hip dislocation can be associated with fractures of

both the femoral head and neck [4]. This is a Type III Pipkin classification. This combination occurs because of forced attempts at closed reduction of the dislocation. However some cases without attempted reduction have been reported [539].

Combined fractures of the femoral head and neck or isolated head fracture without dislocation of the hip joint are not classified. The present case is different from the ones reported in orthopaedic literature: there is no hip joint dislocation.

To our knowledge it's a second case after Kang II Kim an al observation [6]. This authors suggest that the fracture of femoral neck extended into the femoral head and the hip is no dislocated. One observation of isolated femoral head fracture without hip dislocation has been described [3].

Isolated fractures of femoral head or concomitant fractures of the femoral head and neck without hip dislocation need to be classified. It's necessary to modify the current classifications of the injuries.

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