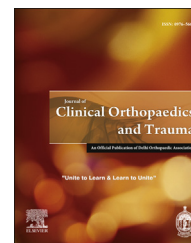


Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

SciVerse ScienceDirect

journal homepage: [www.elsevier.com/locate/jcot](http://www.elsevier.com/locate/jcot)

## Case Report

# A rare case of unicondylar medial Hoffa fracture associated with ipsilateral vertical patella fracture

Amine Marzouki MD<sup>\*,a</sup>, Said Zizah MD<sup>a</sup>, Mounir Benabid MD<sup>a</sup>, Oussama Elassil MD<sup>a</sup>, Kamal Lahrach MD<sup>a</sup>, Fawzi Boutayeb PHD<sup>a</sup>

Orthopaedic Surgery and Traumatology A, University Hospital Hassan II, Fez, Morocco

### ARTICLE INFO

#### Article history:

Received 15 September 2012

Accepted 16 January 2013

Available online 22 January 2013

#### Keywords:

Hoffa

Unicondylar

Femoral

Coronal fracture

Patella

### ABSTRACT

An 18 year old male patient was hit by a car to his motorcycle causing a unicondylar Hoffa fracture and an ipsilateral patella fracture. Hoffa fracture is a rare lesion and this association of injury has not been reported before.

Copyright © 2013, Delhi Orthopaedic Association. All rights reserved.

## 1. Introduction

Isolated coronal plane fractures of the femoral condyles (Hoffa fracture) are unusual high velocity injuries. The injury may be missed on routine radiography in the undisplaced fracture. Open reduction, internal fixation and early mobilization are essential for good long-term results. Hoffa fracture can exceptionally occur with ipsilateral vertical patella fracture. We report a case of this rare association.

## 2. Case report

An 18 years old male was admitted to the emergency department after being involved in a car accident. He was hit by a car to his motorcycle. The impact was frontal, on his left knee. He reported a severe pain, a swelling in his left knee,

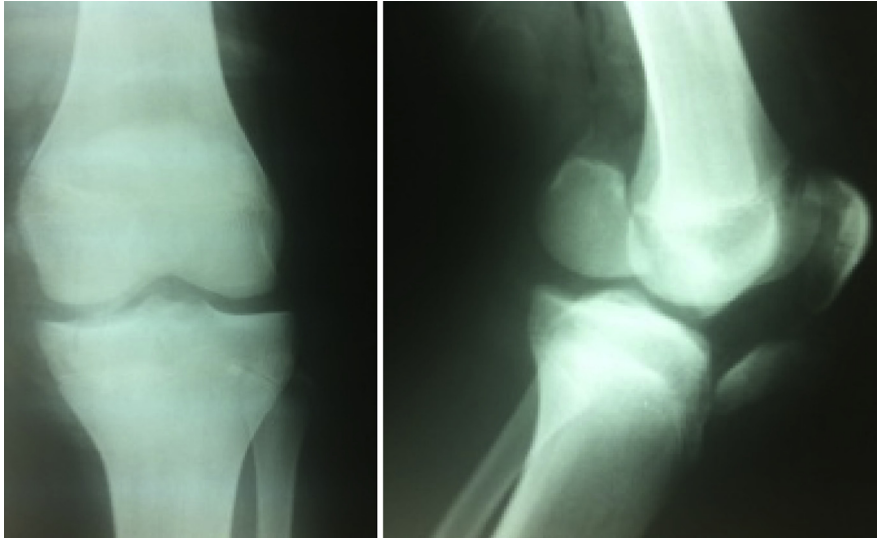
and functional impotency in his left inferior limb. Local examination showed a significant swelling of the left knee. No open wounds were noted in that region. Standard radiographs in anterior-posterior (AP) incidence were performed after admittance; the X-rays revealed a displaced Hoffa fracture (coronal unicondylar medial femoral fracture) and vertical patella fracture (Fig. 1). This injury was not associated with peripheral nerve damage nor with vascular lesions and no other fractures were noted. In order to better assess the extent of the damage and to better plan the treatment, a computer tomography (CT) to the left knee was performed. CT examination, confirmed the diagnosis and the important displacement of the fracture (Fig. 2). Using a medial approach, and after reduction the fragments temporarily fixed with Kirschner wires, we fixed the Hoffa fracture with two 6.5 cannulated screws. Fluoroscopy was used to ensure there was no violation of the distal femoral physis

\* Corresponding author. Tel.: +212 6 61 26 10 22.

E-mail addresses: [doc.amine@hotmail.com](mailto:doc.amine@hotmail.com), [doc.Marzouki@hotmail.com](mailto:doc.Marzouki@hotmail.com) (A. Marzouki).

<sup>a</sup> Home Address: Appt 1, Imm 5, Résidence Rawd Alazhar, Avenue Beyrou, Route d'Imouzzar, Fès, Maroc, BP 30000, Morocco. 0976-5662/\$ – see front matter Copyright © 2013, Delhi Orthopaedic Association. All rights reserved.

<http://dx.doi.org/10.1016/j.jcot.2013.01.003>



**Fig. 1 – Anteroposterior and lateral radiograph of the left knee shows a displaced Hoffa fracture and fracture of the patella.**

and to verified reduction and screw position. We also reduced and stabilized the vertical patella fracture by tension band wiring (Fig. 3). We applied a cylindrical cast and allowed the patient to walk with crutches, non-weight bearing. Physical rehabilitation program was started after surgery to allow the patient to regain full range of movement. At follow-up 6 weeks postoperatively, the fracture was radiographically healed and the patient had no complaints or sensation of snapping. Full weight-bearing was allowed progressively after 8 weeks. At the last follow-up visit 20 months after the operation, the patient was pain free and able to achieve a normal range of movement, with 150° flexion of the knee and full extension (Fig. 4). Radiographs revealed a consolidated fracture (Fig. 5).

### 3. Discussion

Coronal fractures of the femoral condyle, first described by Hoffa in 1904, are an unusual injury. It is usually caused by high energy trauma.<sup>1</sup> This type of injury is very rare and misdiagnosis is common. It can be especially in motorcycle accident.<sup>2,3</sup> It most commonly affects the lateral femoral condyle.<sup>2</sup> Unicondylar Hoffa fractures have been reported in isolation,<sup>2-4</sup> or with ipsilateral femoral supracondylar and intercondylar fractures,<sup>5,6</sup> of the femoral neck or shaft<sup>7</sup> and patellar dislocation.<sup>8</sup> A case of ipsilateral Hoffa fracture and patella fracture is extremely rare. To our acquaintance, such a fracture pattern has not yet been reported in the literature



**Fig. 2 – A computed tomography scan of the left knee shows coronally oriented fracture through medial femoral condyle.**

Download English Version:

<https://daneshyari.com/en/article/3245473>

Download Persian Version:

<https://daneshyari.com/article/3245473>

[Daneshyari.com](https://daneshyari.com)