



Case Report

Fracture of the proximal extremity of the tibia after anterior cruciate ligament reconstruction: case report[☆]



Márcio de Oliveira Carneiro, Thiago de Almeida Monteiro*,
Marcos Renato Zenovello Bueno, Jorge Luis Augustin Júnior

Faculdade de Medicina de São José do Rio Preto (FAMERP), São José do Rio Preto, SP, Brazil

ARTICLE INFO

Article history:

Received 26 May 2014

Accepted 27 June 2014

Available online 27 April 2015

Keywords:

Tibial fractures

Anterior cruciate ligament reconstruction

Autologous transplantation

Palavras-chave:

Fraturas da tibia

Reconstrução do ligamento cruzado anterior

Transplante autólogo

ABSTRACT

We report a rare condition that has been little described in the literature: a fracture of the proximal extremity of the tibia after anterior cruciate ligament reconstruction using an autologous patellar bone-tendon graft. In this report, we discuss the factors that predisposed toward this episode, the treatment and the evolution of the case after the surgical treatment.

© 2014 Sociedade Brasileira de Ortopedia e Traumatologia. Published by Elsevier Editora Ltda. All rights reserved.

Fratura da extremidade proximal da tibia após reconstrução do ligamento cruzado anterior: relato de caso

RESUMO

Relatamos uma condição rara, pouco descrita na literatura, que é a fratura da extremidade proximal da tibia após reconstrução do ligamento cruzado anterior com enxerto autólogo osso-tendão patelar-osso. Neste relato, discutiremos fatores predisponentes ao episódio, tratamento e evolução do caso após tratamento cirúrgico.

© 2014 Sociedade Brasileira de Ortopedia e Traumatologia. Publicado por Elsevier Editora Ltda. Todos os direitos reservados.

Introduction

Reconstruction surgery on the anterior cruciate ligament (ACL) performed arthroscopically presents a high rate of good

results.¹ More than 100,000 new cases are performed in the United States every year.² However, this procedure is not free from complications,³ with an incidence rate of between 1.8% and 24%.⁴

[☆] Work developed at the Base Hospital, Faculdade de Medicina de São José do Rio Preto (FAMERP), São José do Rio Preto, SP, Brazil.

* Corresponding author.

E-mails: thiagomonteiro33@yahoo.com.br, goianomonteiro@yahoo.com.br (T. de Almeida Monteiro).

<http://dx.doi.org/10.1016/j.rboe.2015.04.009>

2255-4971/© 2014 Sociedade Brasileira de Ortopedia e Traumatologia. Published by Elsevier Editora Ltda. All rights reserved.



Fig. 1 – Frontal radiograph on knee showing fracture of proximal tibia.

The complications that have been described include: arthrofibrosis, patellar fracture, “Cyclops” lesions, synovitis, patellar tendinitis, pain in the graft donor area and osteolysis,³ among others. The commonest of these is joint stiffness.⁴ Fracturing of the proximal tibia is a serious complication that has only been described in a few cases in the literature.^{5,6} In the present report, we describe this complication.

This case consisted of a fracture of the proximal extremity of the tibia that occurred in a patient 4.5 months after an arthroscopic operation to reconstruct the ACL.

Case report

The project for this study was approved by our institution’s research ethics committee under the protocol number 5985/2011.

The patient was a 17-year-old male who was attended at our hospital, with a history of spraining his left knee after stepping into a hole in the asphalt when crossing a street. He arrived at the emergency service with a condition of pain in his left knee and leg, accompanied by functional limitation and inability to bear weight on the affected leg. He said that he had undergone ACL reconstruction surgery 4 months previously, in which a graft from the ipsilateral patellar tendon had been used. Radiographs of the knee were produced in frontal and lateral views, from which an extra-articular fracture of the proximal tibia was diagnosed. The fracture line reached the region of the anterior tibial tuberosity (ATT), which was the site from which the bone plug for the bone-patellar tendon-bone graft had been harvested (Figs. 1 and 2). The patient underwent surgical treatment in which open reduction and internal fixation using a plate and screws were performed (Figs. 3 and 4). No loosening of the tibial interference screw that had been used in the ACL reconstruction was seen. The patient presented good evolution with the treatment that had been proposed and did not present any functional alterations or any alterations in specific tests for evaluating the reconstructed ACL. Consolidation of the fracture was achieved by the end of the



Fig. 2 – Lateral radiograph on knee showing fracture of proximal tibia.



Fig. 3 – Frontal radiograph after operation.

Download English Version:

<https://daneshyari.com/en/article/2707964>

Download Persian Version:

<https://daneshyari.com/article/2707964>

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