

Accepted Manuscript

Title: Navigation for Lower Limb Alignment during Internal Fixation of Complex Tibial-Plateau Fractures

Author: B. Vibert R. Pailhé V. Morin B. Rubens-Duval D. Saragaglia



PII: S1877-0568(18)30103-8
DOI: <https://doi.org/doi:10.1016/j.otsr.2018.03.006>
Reference: OTSR 1994

To appear in:

Received date: 12-2-2018
Accepted date: 20-3-2018

Please cite this article as: Vibert B, Pailhé R, Morin V, Rubens-Duval B, Saragaglia D, Navigation for Lower Limb Alignment during Internal Fixation of Complex Tibial-Plateau Fractures, *Orthopaedics and Traumatology: Surgery and Research* (2018), <https://doi.org/10.1016/j.otsr.2018.03.006>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Technical note

Navigation for Lower Limb Alignment during Internal Fixation of Complex Tibial-Plateau Fractures

B. Vibert*, R. Pailhé*, V. Morin*, B. Rubens-Duval*, D. Saragaglia*

*Service de Chirurgie Orthopédique et de Traumatologie du Sport, Urgences, CHU de Grenoble, Hôpital Sud. 38130, Échirolles, France

Corresponding author: Benoit Vibert, Service de Chirurgie Orthopédique et de Traumatologie du Sport, Urgences, CHU de Grenoble, Hôpital Sud. 38130, Échirolles, France

E-mail: BVibert@chu-grenoble.fr

ABSTRACT

In complex fractures of the proximal tibial metaphysis and epiphysis, possible adverse outcomes after internal fixation include not only joint surface incongruity, but also lower limb malalignment requiring revision surgery. Navigation has been proven effective for the intra-operative control of lower limb alignment during osteotomy and knee arthroplasty. In complex traumatic fractures, temporary fixation by a locking screw plate allows sensor positioning followed by navigation manoeuvres to adjust lower limb alignment. If malalignment is found, the construct can be modified economically by altering the diaphyseal fixation without modifying the metaphyseal screws. The objective of this study was to describe the use of navigation in three patients who required internal fixation of tibial-plateau fractures.

Key words: Knee. Navigation. Tibial plateau fracture. Internal fixation.

INTRODUCTION

Internal fixation is challenging in tibial-plateau fractures. Complex metaphyseal and epiphyseal fractures type 41A3 or 41C in the AO classification raise the greatest difficulties [1]. Reconstruction

Download English Version:

<https://daneshyari.com/en/article/8802162>

Download Persian Version:

<https://daneshyari.com/article/8802162>

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