## **Accepted Manuscript**

Distal femoral physeal crush injury with metaphyseal comminution – a report of two cases and a new perspective to physeal injury

Prateek Behera, Nirmal Raj Gopinathan, Avinash Kumar, Balaji Saibaba, Pebam Sudesh, Rakesh John

PII: \$1008-1275(16)30350-9

DOI: 10.1016/j.cjtee.2017.04.010

Reference: CJTEE 266

To appear in: Chinese Journal of Traumatology

Received Date: 14 November 2016

Accepted Date: 10 April 2017

Please cite this article as: Behera P, Gopinathan NR, Kumar A, Saibaba B, Sudesh P, John R, Distal femoral physeal crush injury with metaphyseal comminution – a report of two cases and a new perspective to physeal injury. *Chinese Journal of Traumatology* (2017), doi: 10.1016/j.citee.2017.04.010.

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.



Case report

Distal femoral physeal crush injury with metaphyseal comminution – a report of two cases and a

new perspective to physeal injury

Prateek Behera<sup>1,2,\*</sup>, Nirmal Raj Gopinathan<sup>1</sup>, Avinash Kumar<sup>1</sup>, Balaji Saibaba<sup>1</sup>, Pebam Sudesh<sup>1</sup>,

Rakesh John<sup>1</sup>

<sup>1</sup>Department of Orthopaedics, PGIMER, Chandigarh 160012, India

<sup>2</sup>Central Institute of Orthopaedics, VMMC and Safdarjung Hospital, New Delhi 110029, India

\*Corresponding author: Email: pbehera15@gmail.com

**Abstract** 

The physis of a long bone may get 'sandwiched' and crushed between the metaphysis and the

epiphysisif it is traumatically loaded along its long axis. Such a physeal injury may lead to

complications like angular deformities and growth restrictions and hence, management of such injuries

requires adequate planning and attentive execution.

Two patients with distal femoral physeal crushing were treated using such a ring fixator that one ring

had the wires passing through the epiphysis and the other through the femoral shaft. On table image

intensifiercontrolled distraction of the crushed physis was done to bring the height of the physis

similar to that of the opposite limb. Patients were followed up for more than two years clinically and

radiologically. There was no clinical or radiological angular deformity of the operated limbs. MRI

scans showed intact physes with no physeal bar formation in either of the two patients.

The distraction obtained by the ring fixator appears to have provided ample 'breathing space' to the

compressed physis and that the growth potential may have been re-gained by the procedure. However,

two years is a relatively short duration of follow-up and further follow-up of longer duration and in

greater number of patients is needed to gauge the actual effectiveness of the technique used by us.

## Download English Version:

## https://daneshyari.com/en/article/8694940

Download Persian Version:

https://daneshyari.com/article/8694940

<u>Daneshyari.com</u>