



## Case Report

# Medial migration of the intramedullary Gamma 3 nail – a case report<sup>☆</sup>



Ana Costa Pinheiro\*, Bruno Alpoim, António Félix, Carlos Alves, Cristina Sousa, António Rodrigues

Unidade Local de Saúde do Alto Minho, Viana do Castelo, Portugal

## ARTICLE INFO

### Article history:

Received 5 November 2015

Accepted 1 December 2015

Available online 17 October 2016

### Keywords:

Hip fractures

Bone nails

Bone screws

## ABSTRACT

Intertrochanteric femur fractures are very common in patients over 65 years old, and are often associated with osteoporosis. Proximal femoral nails are preferred because of their biomechanical advantages in the treatment of these fractures, especially if the fracture is unstable. However, many complications associated with intramedullary fracture fixation have been described. The medial migration of the intramedullary gamma nail is a rare complication. The authors report an uncommon but potentially fatal complication, medial and intrapelvic migration of the intramedullary Gamma 3 nails, recorded after one month of osteosynthesis. This article aims to alert the orthopedic community to this rare complication, which may present a high risk of morbidity and mortality.

© 2016 Published by Elsevier Editora Ltda. on behalf of Sociedade Brasileira de Ortopedia e Traumatologia. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Migração medial do cravo cefálico de dispositivo cefalomedular Gamma 3 – Relato de caso

## RESUMO

As fraturas intertrocantericas do fêmur proximal são muito comuns em pacientes acima de 65 anos, por estarem muitas vezes associadas à osteoporose. A fixação do fêmur proximal com dispositivos cefalomedulares, pelas suas vantagens biomecânicas, constitui o tratamento preferencial, especialmente no tratamento das fraturas instáveis. Várias complicações associadas com a fixação cefalomedular tipo Gamma desse tipo de fraturas foram descritas na literatura, a migração medial do cravo cefálico é uma complicação excepcionalmente singular. Os autores relatam uma complicação incomum mas potencialmente

### Palavras-chave:

Fraturas do quadril

Pinos ortopédicos

Parafusos ósseos

<sup>☆</sup> Study conducted at the Local Health Unit of Alto Minho, Viana do Castelo, Portugal; and at the Plastic Surgery Service, Hospital de Gaia, Porto, Portugal.

\* Corresponding author.

E-mail: [ana.alexandra.pinheiro@gmail.com](mailto:ana.alexandra.pinheiro@gmail.com) (A.C. Pinheiro).

<http://dx.doi.org/10.1016/j.rboe.2016.10.004>

2255-4971/© 2016 Published by Elsevier Editora Ltda. on behalf of Sociedade Brasileira de Ortopedia e Traumatologia. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

fatal, a migração medial intrapélvica do cravo cefálico do dispositivo intramedular Gamma 3, verificada após um mês da osteossíntese. Este trabalho aspira a despertar a comunidade ortopédica para essa rara complicação, a qual pode apresentar alto risco de morbidade e mortalidade.

© 2016 Publicado por Elsevier Editora Ltda. em nome de Sociedade Brasileira de Ortopedia e Traumatologia. Este é um artigo Open Access sob uma licença CC BY-NC-ND (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

Intertrochanteric fractures of the proximal femur are very common in patients over 65 years, and are often associated with osteoporosis.<sup>1-3</sup>

These are extracapsular fractures, whose treatment generally consists of osteosynthesis with intramedullary (cephalomedullary nail with more evident indication in

unstable fractures, but also indicated in stable fractures) or extramedullary implant (plate and sliding screw, in stable fractures).<sup>4,5</sup>

Cephalomedullary nailing of the proximal femur is the preferred treatment especially for unstable fractures nailing of the proximal femur, due to its biomechanical advantages.<sup>6-9</sup>

However, various complications associated with intramedullary fixation of this type of fracture have been described; cut-out of the cephalic screw is one of the most

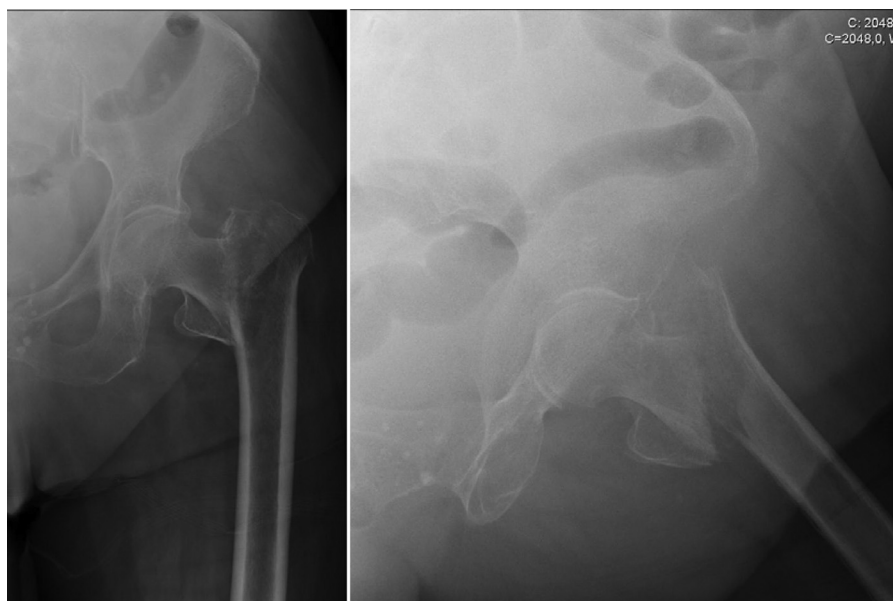


Fig. 1 – Radiograph disclosing an intertrochanteric fracture.

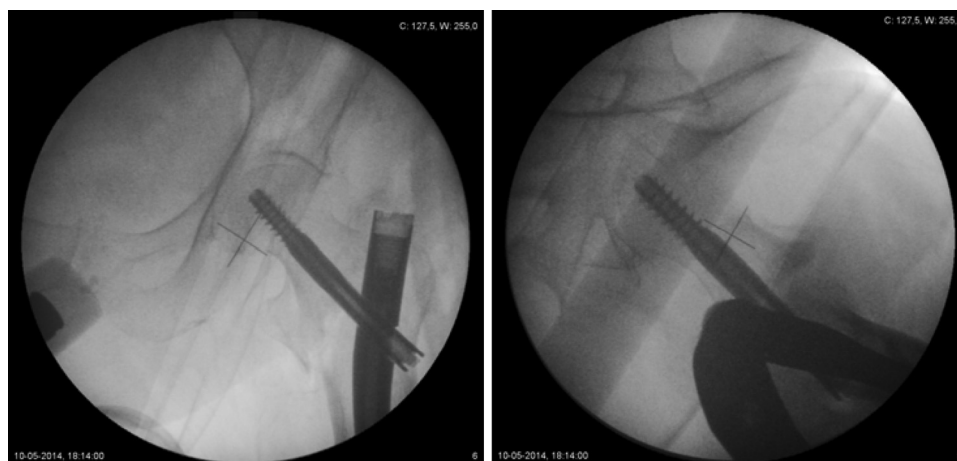


Fig. 2 – The patient underwent closed reduction and osteosynthesis with cephalomedullary screw and nail Gamma3 Stryker 130°; intraoperative radiography of the hip, anteroposterior and lateral views.

Download English Version:

<https://daneshyari.com/en/article/8600665>

Download Persian Version:

<https://daneshyari.com/article/8600665>

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