# ARTICLE IN PRESS

REV BRAS ORTOP. 2017; xxx(xx): XXX-XXX







### Case Report

- A rare case of bilateral central subluxation of the
- hip joint with associated bilateral quadrilateral
- plate fracture in an elderly male due to seizure
- s activity
- 6 Q1 Kiran Makwana<sup>a</sup>, Mayank Vijayuargiya<sup>a</sup>, Nitesh Agarwal<sup>a</sup>, Ketan Desai<sup>b</sup>, Vivek Shetty<sup>a</sup>,\*
- <sup>a</sup> P.D. Hinduja National Hospital, Department of Orthopaedics, Mumbai, India
- b P.D. Hinduja National Hospital, Department of Neurosurgery, Mumbai, India

#### ARTICLE INFO

### 13 Article history:

11 12

17

- Received 20 December 2016
- Accepted 23 January 2017
- 16 Available online xxx
- 18 Keywords:
- 19 Humeral fractures
- 20 Bone plates
- 21 Bone screws

#### ABSTRACT

Musculoskeletal injuries such as dislocation of the shoulder and hip joints and fractures of the femoral neck are known complications of seizures. Bilateral central subluxation of the hip joint with associated bilateral quadrilateral plate fracture is a rare entity and is prone to delayed diagnosis, even more so in patients who experience post-seizure disorientation. The authors report the case of a 74-year-old male patient with bilateral central subluxation of the hip joint with associated bilateral quadrilateral plate fracture due to seizure activity. Bilateral open reconstruction and fixation of the quadrilateral plate with a 3.5-mm pre-bent reconstruction plate reinforced with 3.5-mm pelvic brim reconstruction plate was performed. In conclusion, this case is an example of rare bilateral quadrilateral plate fracture caused due to seizure activity, a fracture for which a high level of suspicion should be kept in mind while evaluating the patient post-seizure episode.

© 2017 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/).

Um caso raro de subluxação central bilateral da articulação do quadril associada a fratura bilateral de placa quadrilateral em um homem idoso devido a convulsões

R E S U M O

Lesões musculoesqueléticas, tais como luxação das articulações do ombro e quadril e fraturas do colo do fêmur, são complicações conhecidas de convulsões. A subluxação central bilateral da articulação do quadril associada a fratura bilateral de placa quadrilateral é uma entidade rara e propensa ao diagnóstico tardio, ainda mais em pacientes que experimentam desorientação pós-convulsão. Os autores relatam o caso de um paciente masculino de 74

E-mail: vivshetty7777@gmail.com (V. Shetty). http://dx.doi.org/10.1016/j.rboe.2017.03.009

2255-4971/© 2017 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/).

Please cite this article in press as: Makwana K, et al. A rare case of bilateral central subluxation of the hip joint with associated bilateral quadrilateral plate fracture in an elderly male due to seizure activity. Rev Bras Ortop. 2017. http://dx.doi.org/10.1016/j.rboe.2017.03.009

<sup>23</sup> Palavras-chave:

<sup>24</sup> Fraturas do úmero

<sup>25</sup> Placas ósseas

Parafusos ósseos

<sup>\*</sup> Corresponding author.

27

28

29

31

32

34

35

36

37

38

41

42

43

44

45

47

48

50

51

52

53

55

56

57

58

61

62

64

65

67

68

69

70

71

72

73

74

## **ARTICLE IN PRESS**

REV BRAS ORTOP. 2017; xxx(xx): xxx-xxx

anos de idade com subluxação central bilateral da articulação do quadril associada a fratura bilateral de placa quadrilateral decorrente de atividade convulsiva. Foi feita reconstrução bilateral aberta e a placa quadrilateral foi fixada com uma placa de reconstrução pré-dobrada de 3.5 mm, reforçada com uma placa de reconstrução da borda pélvica de 3,5 mm. Conclui-se que este caso é um raro exemplo de fratura bilateral de placas quadrilaterais causada pela atividade convulsiva. Os profissionais de saúde devem manter um alto nível de suspeita para esse tipo de fratura ao avaliar pacientes após um episódio convulsivo.

© 2017 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

Many musculoskeletal injuries including dislocation of the shoulder and sterno-clavicular joints, hip joints, fracture of femoral neck, and pelvis are known complications of seizures. They may occur in patients with epilepsy, either due to trauma or unbalanced muscle contractions during seizure episode. 1,2 Quadrilateral plate fracture of acetabulum with central subluxation of hip joint is rarely seen in these patients. It can be easily missed because of lack of history of trauma. High index of suspicion and thorough clinical and radiological examination should be done to prevent delay in diagnosis. We report a rare case of bilateral central subluxation of hip joint with associated bilateral Quadrilateral plate fracture due to seizure activity.

### Case report

A 74-year-old male patient presented to the neurosurgery department with 15 days history of altered sensorium. There was history of generalised tonic clonic seizures for past four months. Since last 7 days, he was bedridden after an episode of severe generalised seizure. The active and passive movements of both upper and lower limbs were severely restricted due to pain. MRI scan of brain had revealed a large 7 cm × 5.5 cm × 4.5 cm size right frontal dural based meningioma. There was severe surrounding white matter oedema involving the right fronto-parietal brain. A right frontoparietal craniotomy was performed by neurosurgeon (KD) and the meningioma was completely removed post-operatively his altered sensorium markedly improved to become conscious and alert. However the movements of bilateral upper and lower limb were restricted. Post-operative CT scan of brain revealed complete excision of the meningioma with regression of the white matter oedema in the right frontoparietal region. In view of improved sensorium and persistent restricted, painful limb movements, an orthopaedic department consultation was taken for further evaluation.

On clinical examination, there was bruising around bilateral hip joint, tenderness was present around both hip joint, no neuro-vascular injury. X-rays of pelvis and right shoulder showed bilateral central ace tabular fracture subluxation (Fig. 1), CT-scan of pelvis (Fig. 2) was done for pre-operative planning.

Bilateral open reconstruction with fixation of quadrilateral plate fracture (Fig. 3) was done one of the authors



Fig. 1 - X-ray showing bilateral quadrilateral plate fracture.



Fig. 2 – CT-scan showing bilateral quadrilateral plate fracture.

### Download English Version:

# https://daneshyari.com/en/article/8599760

Download Persian Version:

https://daneshyari.com/article/8599760

<u>Daneshyari.com</u>