

Erecta Dislocation Following an Epileptic Seizure: A Case Report

Mohamed Badr Errachid*, Youness Dahmani, Reda Lah Bassir, Moncef Boufettal, M. O. Lamrani, M. Kharmaz and M. S. Berrada

Department of Orthopedic Surgery, Ibn Sina Hospital, University Mohamed V, Faculty of Medicine of Rabat, Avenue Mohamed Belarbi El Alaoui B.P.6203 10000, Rabat. Morocco

DOI: [10.36347/sjams.2021.v09i05.022](https://doi.org/10.36347/sjams.2021.v09i05.022)

| Received: 14.04.2021 | Accepted: 25.05.2021 | Published: 28.05.2021

*Corresponding author: Mohamed Badr Errachid

Abstract

Case Report

Erectal dislocation is a rare dislocation of the shoulder, even rarer by the mechanism of seizure. We report the case of an erect dislocation after epileptic seizure in a young man complicated by axillary nerve palsy with partial recovery in the medium term after reduction. The aim of our work is to highlight the diagnostic and prognostic features of this dislocation.

Keywords: erecta, dislocation, epileptic, seizure.

Copyright © 2021 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

The dislocation of the shoulder is considered to be the most frequent dislocation of all the joints, due to the imperfect congruence between the 2 joint surfaces and which is partially compensated by the labrum. It is defined by a total and permanent loss of contact between the humerus head and the glenoid cavity, one must differentiate it from subluxations of the shoulder. It is an orthopedic emergency that should be treated as soon as the patient arrives in the emergency room, first to relieve the patient and second to reduce the risk of immediate and late complications. The erecta variety is a rare form of dislocated shoulder, it is even rarer on the mechanism of epileptic seizure which is often responsible for a posterior dislocation. The interest of our work is to highlight the erect dislocation by an epileptic seizure mechanism in a case.

OBSERVATION

We report the case of a 25-year-old patient known to have epilepsy admitted to the emergency room of the Rabat University Hospital with excruciating pain and total functional impotence in the left shoulder following a tonic-clonic epileptic seizure.

On inspection, the patient presented a vicious attitude of the left shoulder in frozen maximum abduction, return to adduction being impossible, the left wrist is supported by the contralateral hand (figure 1) Neurovascular examination demonstrates hypoaesthesia of the lateral aspect of the shoulder the frontal x-ray

showing an inferior subglenoid dislocation of the shoulder without associated fractures (Figure 2) the patient underwent reduction under sedation with traction - countertraction in the axis of the limb followed by adduction of the shoulder (Figure 3) the postoperative radiography was satisfactory confirming the reduction and ruling out a possible associated fracture. The patient is sent home with an elbow bandage to the body for a period of 3 weeks, after which he has benefited from 15 rehabilitation sessions. The control of joint amplitudes after 6 months aims to limit abduction to 110°.



Fig-1: Clinical vicious attitude of erecta dislocation



Fig-2: Frontal shoulder view demonstrating erecta dislocation



Fig-3: Clinical aspect of reduced erecta dislocation

DISCUSSION

Erectal dislocation is a rare entity of shoulder dislocations not exceeding 0.5% of all forms of shoulder dislocation [1, 2]. The dislocation occurred as a result of an epileptic seizure which is a rare mechanism for this type of dislocation; road accidents being the main mechanism followed by sports accidents [6-7]. The vicious attitude in our patient is typical and resembles erecta dislocations with other mechanisms, with maximum shoulder abduction, head palpated under the glenoid cavity in the axillary region [3-4]. The dislocation is reduced by a traction-countertraction maneuver under sedation, the countertraction is applied to the thorax using a sling by the assistant, the traction is done in the axis of the limb and converted as soon as possible in adduction contained by a sling elbow to the body for 3 weeks. A post-reduction x-ray is mandatory for 2 but: confirmation of reduction and elimination of fractures which may be either initial going unnoticed on the initial x-ray or iatrogenic during reduction. The only immediate complication found before and after reduction is the lesion of the circumflex nerve, which is in accordance with the results of the series by Mallon *et al.* [5] which reports axillary nerve palsy in 60% of cases, other immediate complications, namely brachial plexus palsy or axillary artery lesion or axillary artery thrombosis requiring anticoagulant treatment [8] were not objectified in our patient. The follow-up of our

patient at 6 months find an incomplete recovery of the axillary nerve palsy despite the rehabilitation sessions, with total recovery of the sensitivity of the lateral face of the upper quarter of the left arm and partial motor recovery with an abduction limited to 110°.

CONCLUSION

Dislocation erecta by epileptic seizure mechanism is a rare dislocation on an even rarer mechanism. The clinical presentation and especially the immediate and late complications of our case resemble erecta dislocations by other mechanisms.

Consent

The patient has given their informed consent for the case to be published.

Competing Interests

The authors declare no competing interest.

Authors 'Contributions

All authors have read and agreed to the final version of this manuscript and have equally contributed to its content and to the management of the manuscript.

REFERENCES

1. Tsuchiday T, Yaney K, Kimura Y. (2001). Luxation event of bilateral shoulders. *J Shoulder Elbow Surg*, 10(1):595-7. PubMed | Google Scholar
2. Yamamoto T, Yoshiya K, Kurosaka T. (2003). Luxatio erecta: a report of five cases and reviews of literature. *Am J Orthop*, 32(1):601-3. Google Scholar
3. Davids JR, Talbott RD. (1990). Luxatio erecta humeri a case report. *Clin Orthop Relat Res*; (252):144-149. PubMed | Google Scholar
4. Freundlich BD. (1983). Luxatio erecta. *J Trauma*, 23(5):434-436.
5. Mallon WJ, Bassett FH 3rd, Goldner RD. 1990). Luxatio erecta: the inferior glenohumeral dislocation. *J Orthop Trauma*, 4(1):19-24. PubMed | Google Scholar
6. Dahmi FZ *et al.* (2008). Luxation erecta de l'épaule (à propos de huit cas). *J de chirg de la main*, 27(4):167-70. PubMed | Google Scholar
7. Gordon I *et al.* (2009). Results of treatment of luxatio erecta. *Jse*, 07(1):062. PubMed | Google Scholar
8. Garcia R, Ponsky T, Brody F, Long J. (2006). Bilateral luxatio erecta complicated by venous thrombosis. *J Trauma*, 60(1):1132-4. PubMed | Google Scholar
9. Gagey O, Gagey N, Boisrenoult P, Hue E, Mazas F. (1993). Experimental study of dislocations of the scapulohumeral joint. *Rev Chir Reparatrice Appar Mot*, 79(1):13-21. PubMed | Google Scholar.