

Neonatal Displaced Epiphysiolysis of Humeral Head: Case Report

Tabet Al-Sadek^{1*}, A Al-Sadek², G Dimitrov³, K Marinov⁴

¹Department of Orthopedics and Traumatology, Belhoul European Hospital, Dubai, UAE

²Medical University of Sofia, Bulgaria

³Department of Orthopedics and Traumatology, Medical University of Pleven, Bulgaria

⁴Department of Special Surgery / Thoracic Surgery, Vascular Surgery, Pediatric Surgery and Orthopedics and Traumatology University Hospital, Stara Zagora, Bulgaria

***Corresponding author:** Tabet Al-Sadek, Belhoul European Hospital, Dubai, UAE. Tel: +971551503964; Email: drthabet@abv.bg

Citation: Al-Sadek T, Al-Sadek A, Dimitrov G, Marinov K (2017) Neonatal Displaced Epiphysiolysis of Humeral Head: Case Report. J Orthop Ther: JORT-148. DOI: 10.29011/JORT-148.000048

Received Date: 13 August, 2017; **Accepted Date:** 28 August, 2017; **Published Date:** 04 September, 2017

Abstract

Purpose: In our case, we present a 1-day old baby girl, without complications during delivery reported, presented left shoulder deformity and flaccid paralysis in her left upper limb.

Methods: A closed reduction was performed under general sedation in Neonatal Intensive Care Unit. Control radiography and sonography showed a good reduction.

Results: Despite Humeral head ossification nucleus asymmetry, at 6 months, the patient was asymptomatic and recovered full range of movement.

Conclusion: Early closed reduction looks to be a good method of treatment for these types of deformities.

Keywords: Displaced; Epiphysiolysis; Neonatal

Introduction

Neonatal traumatic epiphysiolysis of the humeral head is rare, and only a few cases are reported in the literature. [1,2]. Incidence of bone injury during the process of delivery is 1 per 1000 live births [3]. In a matter of frequency, the clavicle is the most common bone fractured (45,7%) followed by humerus (20%), femur (14,3%) and depressed skull fracture (11,4%) [3]. Lack of antenatal care, malpresentation often leading to obstructed labor and operative deliveries were found to be risk factors for bone injuries [3].

Case Presentation

In our case, we present a 1-day old baby girl, without complications during delivery reported, presented left shoulder deformity and flaccid paralysis in her left upper limb (Figure 1&2).



Figure 1: 1-day old infant presented with left shoulder deformity and flaccid paralysis in her left upper limb.

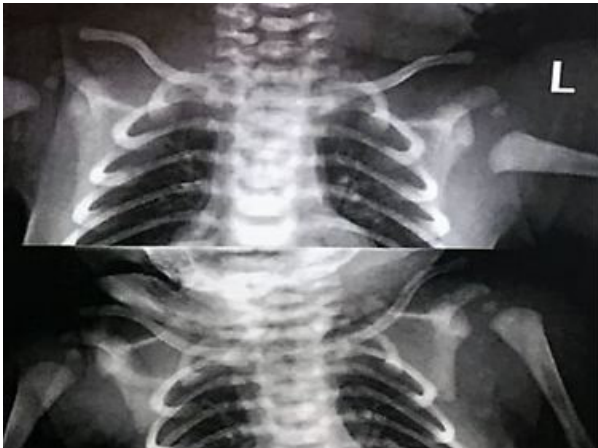


Figure 2: Diagnostic radiographs showing and displaced epiphysioly-sis.

Materials and Methods

A closed reduction was performed under general sedation in Neonatal Intensive Care Unit. Control radiography and sonography showed a good reduction. The patient was immobilized for 3 weeks with a velpeau, except for physiotherapy exercises. Radiography and Electromyographic (EMG) controls were performed at 1,3 and 6 months (Figure 3&4).

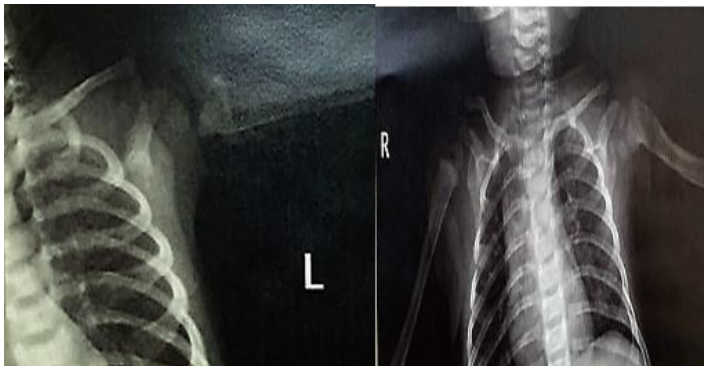


Figure 3: 1-month control radiographs. **Figure 4:** 3 months control radiographs

Results

Despite Humeral head ossification nucleus asymmetry, at 6 months, the patient was asymptomatic and recovered full range of movement (Figure 5).



Figure 5: 6 months control radiographs.

Discussion and Conclusion

- Are MRI and EMG necessary to obtain a complete diagnosis and improve our final results?
- Early closed reduction looks to be a good method of treatment.
- For how long is immobilization mandatory?
- Long term evolution of gleno-humeral articulation will be affected by humeral head ossification nucleus asymmetry observed?

References

1. Michael JW, Gossmann A, Eysel P, Rutt J (2008) Neonatal traumatic epiphysioly-sis of the humeral head. A rare occurrence. *Unfallchirurg* 111: 1017-1020.
2. Dhillon KS (1985) Neonatal proximal femoral epiphysioly-sis (NPFE): a case report. *Med J Malaysia* 40: 41-43.
3. Bhat BV, Kumar A, Oumachigui A (1994) Bone injuries during delivery. *Indian J Pediatr* 61: 401-405.