

Bilateral Humerus Fracture Following Birth Trauma

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ABSTRACT

Birth injuries especially to humerus are rare in Caesarean sections as compared to vaginal deliveries. But in some difficult extractions even with expert care, injury may be sustained by the newborn. This is a report of a case of birth trauma induced fractures of both humerus during Caesarean section.

Key words:

Birth trauma, fracture, humerus

INTRODUCTION

Foetal injuries complicate 1.1% of Caesarean deliveries.^[1] Caesarean section is considered to be safer than vaginal delivery. However, in certain cases, injury may be sustained by the newborn as a result of the mechanics of delivery. Bilateral humerus fracture due to the birth trauma, which is extremely rare, can occur during Caesarean section.^[2] We report here a case of bilateral humerus fractures due to difficult labor in rural hospital, during Caesarean section.

CASE REPORT

The full-term newborn weighing 2.9 kg was delivered by Caesarean section. The indication for the Lower segment caesarian section (LSCS) was breech presentation with oligohydramnios. There was no history of consanguinity, metabolic bone disease, diabetes mellitus or syphilis in parents. When the baby was extracted, during a difficult Caesarean section, the obstetrician gave history of energetic traction and rotation during the section. The child cried immediately at birth, Apgar score was 8/10 at 1 and 5 minutes. The baby was crying incessantly and on clinical examination, swellings of both the arms were noticed simultaneously. The swellings were tender with abnormal mobility. The rest of the general examination including skin was normal. The systemic examination also did not reveal any abnormalities. The infantogram done immediately showed bilateral humeral fractures [Figure 1]. Complete hemogram was normal. No biochemical abnormalities were seen. The newborn was immobilized with bilateral splints by the orthopedician. The child improved and there was no residual deformity on discharge. No complications were noticed during the hospital stay.

DISCUSSION

Injuries occurring during birth are referred to as birth

trauma or obstetrical injuries and they are associated with different etiological causes. The risk factors include obstetric maneuvers during delivery, especially Caesarean sections, prolonged labor, and prematurity, macrosomia, breech presentation, shoulder dystocia and forcep-assisted delivery.^[3,4] Although the clavicle has been reported as the commonest bone to fracture after birth trauma during Caesarean delivery, other long bone fractures such as femur, humerus and monteggia fracture dislocation have been described.^[5,6] Pathological fractures occur in infancy from a variety of causes like child abuse, osteogenesis imperfecta and rickets. Fractures secondary to demineralization from paralysis are rare during the neonatal period.

Neonates with bilateral fractures of the humerus in LSCS operative delivery is a rare occurrence. Performing accurate and expert delivery technique with immediate evaluation and timely orthopedic intervention during and after delivery will prevent the fractures and help in avoiding deformities.

Early identification of obstetric factors and improvement in obstetric care of both the mothers and babies during delivery and stoppage of traumatising manoeuvres particularly in the hands of the inexperienced would

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Figure 1: Infantogram showing bilateral humeral fractures

reduce the incidence and severity of this disability. Educating the pregnant women about the importance of antenatal care will play important part in the reduction of this pathology. It will be important to examine the

neonates thoroughly after deliveries to detect birth injuries and manage promptly.

REFERENCES

1. Alexander JM, Leveno KJ, Hauth J, Landon MB, Thom E, Spong CY, *et al.* Fetal injury associated with cesarean delivery. *Obstet Gynecol* 2006;108:885-90.
2. Canpolat FE, Köse A, Yurdakök M. Bilateral humerus fracture in a neonate after caesarean delivery. *Arch Gynecol Obstet* 2010; 281:967-9.
3. Salonen IS, Uusitalo R. Birth injuries: Incidence and predisposing factors. *Z Kinderchir* 1990;45:133-5.
4. Nadas S, Reinberg O. Obstetric fractures. *Eur J Pediatr Surg* 1992;2:165-8.
5. Bhat BV, Kumar A, Oumachigui A. Bone injuries during delivery. *Indian J Pediatr* 1994;61:401-5.
6. Al-Habdan I. Birth-related fractures of long bones. *Indian J Pediatr* 2003;70:959-60.

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