

Case Report

A case of fracture of humerus in newborn delivered by elective caesarean section

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ABSTRACT

Birth fractures are common during vaginal deliveries and with breech presentations. This case report of fracture humerus during elective LSCS done for previous LSCS with vertex presentation and with no predisposing risk factors.

Keywords: Birth fractures, LSCS

INTRODUCTION

Birth injuries especially to humerus are rare in caesarean section as compared to vaginal delivery.¹ Birth fractures can occur and may be a source of medico-legal problems for doctors, mid-wives and other medical staff.² Birth fractures are usually diagnosed by obstetricians or pediatricians immediately after birth or during post-natal period. We report one such case of fracture of humerus in newborn delivered by elective LSCS done for previous LSCS with vertex presentation.

CASE REPORT

A woman of age 25 years, G2P1L1 was admitted at 38 weeks +3 days gestation. She was taken up for elective caesarean section with an indication of post LSCS pregnancy not willing for vaginal delivery. There was no positive history of metabolic bone disease, oestrogenesis imperfecta, diabetes mellitus and syphilis in parents. During the process of delivery a snap was heard over the right shoulder. The child cried immediately after birth with APGAR scores of 7/10 and 9/10 at 1 minute and 5 minutes respectively. There was a deformity, swelling

and abnormal mobility in the right arm associated with excessive crying of the newborn. Rest of the systemic and general examination was normal. The digital radiograph of infant showed spiral fracture of right humerus of the newborn (Figure 1). The limb of the new born was immobilized with POP splint by the orthopedician. The baby was discharged after 1 week and advised follow-up in the OPD.



Figure 1: Showing fracture humerus.



Figure 2: Fracture humerus with POP slab.

DISCUSSION

Birth injuries though rare during LSCS are an important and preventable cause of morbidity to the baby. Through decades there have been occasional reports of fractures of femur, depressed fracture of skull, fracture tibia and radius and rarely humerus and these were mostly in difficult breech extraction.³ The risk factors include obstetric maneuvers during delivery especially LSCS, prolonged labour, prematurity, macrosomia, breech presentation, shoulder dystocia and forceps assisted delivery.^{4,5} Birth fractures predominantly affect clavicle,

humerus or femur.⁶ In a study by Nasab in 2011, it was observed that vaginal delivery may be a risk factor for birth fractures as most of fractures occurred during vertex presentation delivered vaginally and none of the infant with birth fracture was delivered by caesarean section in their study.² Literature review did not consider emergency caesarean delivery as one of the predisposing factors for such birth injuries.⁶ Case reports of fracture humerus during LSCS are rare and mostly associated with breech presentation and difficult extraction. Our case report emphasises that fracture humerus can still occur even without the above mentioned risk factors. The importance of correct technique of delivering baby during LSCS with immediate recognition and prompt orthopedic intervention will help prevent fractures and subsequent deformities.

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