

## Long Bone Birth Injury in a Preterm DADC Twin Baby after Caesarean Section: A Rare Case Report

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**Abstract:** Caesarean section is considered relatively safe with respect to fetal injuries and is safer when compared to vaginal delivery in difficult situations. Risk factors for long-bone fractures are macrosomia, breech presentation, twin pregnancy. A Thirty-four weeker DADC twins born through caesarean section in view of breech twin delivery and oligohydramnios with antenatal risk factors of hypothyroidism and PIH, male with a birth weight of 2000 grams and other female with a birth weight of 1500 grams. Male new born who was bigger in size and breech in presentation sustained a fracture of the left femur. Femur fracture being rare complication should be kept in mind and proper delivery protocols for such anticipated complications in high risk population group should be made and considered.

**Keywords:** Caesarean section, Twin pregnancy, Femur fracture.

### INTRODUCTION

Clavicle, humerus, and femur are the most commonly fractured bones during new born delivery. Hannah et al [1] showed that the fracture of long bones occurred in 0.1% of cases during caesarean section and 0.5% of vaginal delivery. Risk factors for femoral fractures are twin pregnancy, breech presentation, premature delivery [2] Caesarean section is considered safe with respect to fetal injuries and is more of a safer approach when compared to vaginal delivery in difficult situations. We report a case of femur fracture in one of twin baby that occurred during the course of a caesarean section.

### CASE REPORT

A 32 old primi with antenatal risk factors of hypothyroidism and PIH and diagnosed case of primary infertility conceived by ICSI conception delivered a DADC twins one male with birth weight of 2000 grams and other female with a birth weight of 1500 grams through caesarean section in view of breech twin delivery and oligohydramnios. Prenatal history was uneventful. Both Babies were having Apgar score of 9/10 at 1 minute and 10/10 at 5 minutes and baby was transferred to NICU for further management and care in view of LBW and preterm. During detailed physical evaluation of babies' male baby was identified to have a left mid-thigh swelling and restricted leg movements with excessive crying on touch. X-ray of left femur revealed fracture of shaft of femur with displacement (fig.1) The Skeletal survey looked normal and mineralization was apparently good on visual examination and there were no other findings like blue sclera or other deformities, hypotonia on physical examination. Serum calcium, phosphorus, and alkaline phosphatase were normal. There was no positive family history or similar complaint in family members. Diagnosis of fracture of left femur shaft secondary to a

birth injury was made and hence neonate was referred to Paediatric Orthopaedican where surgeon did a splint and asked for follow up after 3 weeks for final fixation if required.



Fig-1: Left femur mid shaft fracture

## DISCUSSIONS

Femur bone fracture follows clavicle during caesarean delivery, humerus being rare [3] Numerous condition has been described in literature which can lead to fracture of long bones in new-borns and commonly associated conditions are primigravida, low birth weight, twin pregnancy, fibromas, macrosomia, and inadequate incision in the lower uterine segment, and presentation of foetus like breech [4] As femur fracture relatively, uncommon such a complication should be kept in mind [4,5] In our case mother being Primi, twin pregnancy and breech presentation, made baby prone for such complications. A proper and meticulous evaluation of cause and proper delivery protocols for such anticipated complications in high risk population group should be made into account to decrease such complications.

## CONCLUSION AND RECOMMENDATION

Femur fracture being rare complication should be kept in mind and proper delivery protocols for such anticipated complications in high risk population group should be made and considered.

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## Conflicts of interest

There are no conflicts of interest

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