

## Case Report

# Congenital Genu Recurvatum with Dislocation of the Knees: A Case Report

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**ABSTRACT**

A baby girl was born with severe deformity of the knees. Clinically and radiologically she was diagnosed as congenital dislocation of the knees. Gentle manipulation

followed by malleable splints corrected the deformity in three weeks. A follow up at the age of one year showed normal position of the knees.

**KEYWORDS:** congenital, genu recurvatum, knee dislocation

**INTRODUCTION**

Congenital genu recurvatum is a rare malformation characterized by hyperextension of the knee and marked limitation of flexion. We report a case of a newborn baby with hyperextension of both knee joints and anterior dislocation of tibia on femur.

**CASE REPORT**

A full term baby girl born by Caesarian section (due to breech presentation), presented with extreme hyperextension of both knees almost touching the abdomen (Fig. 1). Both knees were straightened passively. There were no associated anomalies. Radiograph revealed anterior dislocation of tibia on femur (Fig. 2). Both hips showed acetabular dysplasia (Fig. 3). Passive stretching followed by malleable splints were used from the first day (Fig. 4). The splints were changed every third day with gradual bending. In three weeks, the knees adopted a normal shape (Fig. 5). The splints were discontinued and the mother was

advised to continue passive stretching. The acetabular dysplasia was treated by abduction splints for six weeks. A follow up at the age of one year showed normal position of both knees (Fig. 6 & 7) as well as both hips (Fig. 8). She could walk with a normal gait.

**DISCUSSION**

Congenital genu recurvatum is an uncommon condition that can present in three different forms, namely, congenital hyperextension, congenital hyperextension with anterior subluxation of the tibia on the femur, and congenital hyperextension with anterior dislocation of the knee joint on the tibia. Hyperextension is frequently present in normal knees of a breech baby. The position in utero may influence the development of dislocation of the knees when the fetus is in breech position.

Congenital dislocation of the knee, first described in 1922, is a rare condition, and is sometimes associated with other congenital malformations<sup>[1]</sup>. Diagnosis is made by physical



**Fig. 1:** Photograph of a newborn with congenital dislocation of the knees



**Fig. 2:** Lateral radiograph of the knee at birth showing anterior dislocation of the knee

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Fig. 3: AP radiograph of hips at birth showing bilateral acetabular dysplasia



Fig. 4: Photograph showing manipulation and gradual strengthening of the left knee



Fig. 5: Lateral radiograph of the knee, three weeks after treatment with splints, showing normal position of the knee



Fig. 6: Photograph at one year showing normal position of the knees



Fig. 7: Lateral radiograph of the knee at one year, showing normal position of the knee



Fig. 8: AP radiograph of hips at one year showing normal hips

findings of hyperextension and anterior displacement of the tibia. A radiograph confirms the diagnosis of dislocation.

The treatment depends on the severity of the dislocation and the age of the patient. We agree with the other authors<sup>[2,3]</sup> that non-operative treatment is usually successful, if commenced at birth. Early manipulation, combined with splinting and casting is the mainstay of treatment in dislocation. Late presentation may require surgical release of the anterior structures of knee<sup>[4]</sup>. We achieved full correction within a short period of time. The key to success was gentle manipulation and reduction followed by malleable splints. The gradual change in the angle of the splints allowed

early correction. Emphasis should be laid on the immediate recognition and treatment of the condition.

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