

Congenital Genu Recurvatum : A Rare Case Report

Dr. Abhijit Shinde¹, Prof. Dr. Sunil Natha Mhaske²,
Dr. Sonal Shinde³

¹Assistant Professor, ³Senior Resident, Department of Paediatrics, ²Professor & Dean, DVVPF's Medical College & Hospital, Ahmednagar- 414111(MS), India.

Corresponding Author : Dr. Abhijit Shinde

E-mail : jeetshinde007@gmail.com

Address : Department of Paediatrics, DVVPF's Medical College & Hospital, Ahmednagar-414111(MS), India.

Abstract :

Congenital genu recurvatum is a rare malformation characterized by hyperextension of the knee and marked limitation of flexion.¹ We report a case of a newborn baby with hyperextension of Right knee joint and anterior dislocation of tibia on femur. Radiograph revealed anterior dislocation of tibia on femur. Gentle manipulation followed by above knee POP slab was used on the fourth day of life. The slab was removed in three weeks.

Keywords: Genu recurvatum, Subluxation of knee, Congenital dislocation of knee, Hyperextension of knee

Introduction:

Genu recurvatum loosely translates as "backward-bending knee." It is also known as congenital dislocation of the knee (CDK) or congenital dislocation of the patella (CDP), and sometimes as congenital hyperextension. CDK is a rare condition with an incidence rate of approximately 1 per 100,000 live births. 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. Diagnosis is made by physical findings of hyperextension and anterior displacement of the tibia. A

radiograph confirms the diagnosis.

Case report:

We are reporting a case of full term baby girl born by normal vaginal delivery, presented with extreme hyperextension of Right knee. Right knee was straightened passively. There were no associated anomalies. (Fig 1)

Both hips were normal. Radiograph revealed anterior dislocation of tibia on femur. (Fig 2) Gentle manipulation followed by above knee POP slab was used on the fourth day of life. The slab was removed in three weeks. In three weeks, the knee adopted a normal shape. The slab was discontinued and the mother was advised to continue passive stretching. A follow up at the age of one month showed normal position of the knee.

Discussion:

Congenital genu recurvatum is an uncommon condition that can present in two different forms, namely, 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.²

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.^{3,4}

Diagnosis is made by physical 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 that nonoperative 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.^{3,4}

We achieved full correction within a short period of time. The key to success was early gentle manipulation and reduction followed by above knee POP slab. Emphasis should be laid on the immediate recognition and treatment of the condition.



Fig 1



Fig 2

References:

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