Congenital Absence of Bilateral Patella – Case Report

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INTRODUCTION:

Congenital bilateral absence of patella is usually associated with Nail-Patella Syndrome. Also termed as hereditary onycho-osteodysplasia, this spectrum of disease often presented with absence of patella, congenital abnormalities of nails, elbows and knees[1]. However, absence of bilateral patella as an isolated anomaly is extremely rare[2].

REPORT:

This is a case of 4 years old boy, born term via spontaneous vaginal delivery. He was referred to orthopedic for talipes equinovarus deformity of left ankle with flexion deformity of bilateral knee at birth. Initially treated with serial casting and splinting, the talipes equinovarus deformity of left ankle corrected at the age of two years.

Despite serial cylinder casting of bilateral knee, the left knee showed more flexion deformity measuring 60 degrees compared 10 degrees for the right knee. On physical examination, both femoral condyles were prominent with absence of bilateral patella. Hamstring muscle were tight at left popliteal fossa. All fingers and toenails were clinically normal. No other abnormalities noted.

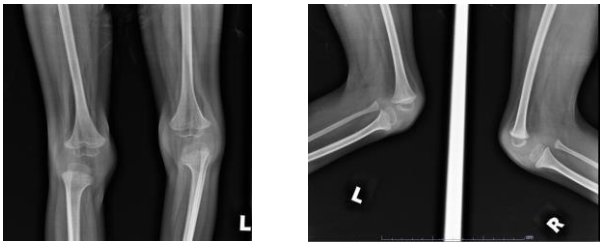

Figure 1: Plain X-ray Bilateral Knee showing absence of patella bilateral knee

X-ray of both knees showed absence of patella. Limb length were equal on both sides.

He underwent fractional left hamstring lengthening at the age of 4 years. The popliteal angle of left knee was 70 degrees preoperatively. Gracilis tenotomy, fractional lengthening of semimembranosus and z-plasty for semitendinosus tendon done and post operative popliteal angle of 40 degrees was achieved. Cylinder cast was applied to maintain the popliteal angle.

Figure 2: Prominent bilateral distal femur

Figure 3: Gracilis tenotomy, fractional lengthening of semimembranosus and z-plasty for semitendinosus

CONCLUSION:

Congenital absence of bilateral patella as an isolated anomaly is extremely rare[1-2]. This child had severe flexion deformity of left knee, causing difficulty to ambulate. Surgical correction of deformity with some residual flexion allowing patient to underwent physiotherapy without compromising other muscle function. Combination of surgical and physiotherapy is prudent to provide better quality of life in growing age child.

REFERENCES:

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