

# Single time angular deformity correction and treatment of knee instability in congenital fibular hemimelia. A case report.

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## Abstract

### BACKGROUND:

Fibular hemimelia is the most frequently occurring congenital anomaly of long bones. These patients, among other deficiencies, have a poor development of the anterior cruciate ligament (ACL). Unless it causes clinically assessed instability of the knee, nonsurgical treatment is given. When surgical treatment is required, correction of angular limb deformity must be realized prior to ACL reconstruction.

### METHODS:

We present the case of a 16-year old patient with congenital fibular hemimelia. Physical examination showed genu valgum, anteromedial rotatory instability and recurvatum of the right knee. We decided to perform surgical correction of the angular deformities and ACL reconstruction in the same surgical time.

### RESULTS:

Twelve months after surgery, the patient had no evidence of clinical instability, with a range of motion from  $-5^{\circ}$ - $110^{\circ}$  of the right knee. No claudication or gait instability was found. The KT-1000 arthrometer showed a difference of 2mm between both knees.

### CONCLUSION:

The ACL reconstruction and corrective osteotomies of angular deformities performed in a single surgical procedure had a good clinical result in a 12 month follow up-period, restoring stability of the knee and allowing a normal gait cycle.