

FIBULAR DEFICIENCY WITH BONE LENGTHENING: A CASE REPORT

Syahril Izwan Alias¹, Mohd Shukrimi Awang¹, Ardilla Hanim Abdul Razak¹, Nik Alyani Nik Abdul Adel¹

¹International Islamic University Malaysia

Introduction: We report a case of a boy who presented with limb length discrepancy (LLD) which from clinical and radiological findings suggestive of fibular deficiency (FD). After thorough clinical assessment and applying algorithm, limb lengthening reconstructive surgery using monorail fixation system was carried out for him.

Discussion: 9 years old boy referred to us for LLD since he was 10 months old.. He was previously treated conservatively with orthosis and shoe raise. Otherwise he is an active and healthy child with normal intellect. His ambulating with short limb gait and his pelvic was tilted to the right side. He has postural scoliosis and his right foot is carvo varus. On local examination of right lower limb, it is smaller than contralateral limb with true length discrepancy of lower limb of 4cm; with 1cm attributed from thigh and 3cm from his leg. There are absent 5th rays, metatarsus adductus with prominent border of lateral midfoot. However, there was no callosity seen. His head of fibula was absent. His Galeazzi, Allis and anterior drawer test was positive. His neurological assessment of lower limbs was normal. Plain radiograph of his long leg view and tibia with fibula shows shortening of both right femur and tibia with fibula. His fibula appears smaller than its contralateral, his foot shows tarsal coalition of talus and calcaneum with absence of navicular bone. His blood investigations are unremarkable. He underwent right tibia gradual lengthening using rail fixation system with aim of 6cm lengthening.

Conclusion: Limb reconstructive surgery using either circular frame fixation or rail fixation system in children with less severe form of FD is a good option. The potential length needed for reconstruct and numbers of ray presented in the foot at birth can act as an indicative guide when deciding upon treatment options.