

Child With Painful Flat Foot

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INTRODUCTION:

Congenital vertical talus (CVT) is a rare rigid flatfoot disorder characterized by hindfoot valgus and equinus with fixed dorsal dislocation of the navicular on the talar head. Its prevalence is estimated 1 in 10000 live births. Etiology remains unknown with majority are associated with neurologic disorders.¹ This case report presents a child with atypical presentation of CVT.

REPORT:

A 4-year-old active boy, diagnosed with bilateral flexible flat feet at the age of 2 presented to our clinic complaining of painful foot for the past 6 months. He was still able to ambulate fully weight bearing unaided. Clinically, child exhibited tenderness at bilateral prominent talar head, equino-planovalgus deformity with positive Jack test and no rocker-bottom deformity of midfoot. Other examination was unremarkable. His Beighton score was 6.



Figure 1: Clinical images of bilateral CVT pre-operatively.



Figure 2: X-ray radiographs of bilateral foot.

Bilateral foot X-ray radiograph in lateral view showed subluxation of talus with Meary angle of 47° on the right and 65° on the left. Kite angle was 54° on the right and was 53° on the left.

He underwent open reduction and K-wiring of talonavicular for bilateral feet, tendoachilles lengthening and plication of medial joint capsule. Intraoperatively, the navicular was dislocated dorsally and did not reduced spontaneously upon passive dorsiflexion. Postoperatively, he was put on cast with ankle in slight dorsiflexion and adduction.

Our patient does not have rocker bottom foot deformity and only had mild equinus with flexible flatfoot. This is suggestive of oblique talus rather than CVT. However, radiographically, on lateral views, there were persistent vertical orientation of talus, Meary angle $>35^{\circ}$ on forced plantarflexion and persistent rigid hindfoot equinus on forced dorsiflexion in which warranted surgical intervention like a CVT.

CONCLUSION:

CVT can be treated using Dobb technique in which serial of reverse Ponseti method followed by pinning of talonavicular joint. However, in severe form of oblique talus with equinus and painful flatfoot, surgical treatment is indicated as in CVT.

REFERENCES:

Dobbs MB, Miller M. Congenital Vertical Talus: Etiology and Management. *J Am Acad Orthop Surg* 2015;23;604-611.