

## Third Time's a Charm: Recurrent CTEV and Treatment with Ponseti Casting

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### INTRODUCTION:

Treatment of congenital talipes-equino-varus (CTEV) following Ponseti casting has been largely successful leading to an estimated decrease in surgical corrections by 2 to 20%. [1] However, till date 11% to 40% of idiopathic CTEV experience recurrence of deformity. [2]

### REPORT:

A 6-year-old boy with a strong family history of CTEV and no known medical illness presented to us with recurrent bilateral foot deformity. He had a history of relapse at the age of 1 and 2 years old in which Ponseti casting and Achilles tendon tenotomy was done in his home country of Indonesia. This was due to non-compliance with foot abduction orthosis. He subsequently presented to us after defaulting follow-up for 4 years.

On inspection the child had bilateral clubfoot deformity and ambulated without aid. Bilateral foot had a Pirani score of 6 with partially correctable forefoot adduction, midfoot cavus and hindfoot equino-varus deformity. Furthermore, there was thickening and callus formation over the lateral border of the forefoot and midfoot bilaterally reflecting chronicity of the deformity. Radiographs revealed no tarsal or calcaneal coalitions.

Weekly Ponseti casting with bilateral above knee casts for a total of eight weeks was done. Pirani score improved from 6 to 1 and bilateral feet in plantigrade position with neutral hindfoot after completion. Despite casting, we were not able to achieve the minimum of 15 degrees dorsiflexion. He was then scheduled for bilateral tendo-Achilles lengthening.



Figure 1: Recurrent CTEV prior to casting.



Figure 2: Clinical photos after serial casting.

### CONCLUSION:

Ponseti method is found to be effective even for older children with recurrent CTEV, in this case up to the third time. Fair trial of the Ponseti casting should be attempted to alleviate the need for additional surgeries required for correction of recurrent deformities. [2]

### REFERENCES:

1. Chand S et. al. Relapse following use of Ponseti method in idiopathic clubfoot. *Journal of Children's Orthopaedics*. 2018;12(6):566-574. doi:10.1302/1863-2548.12.180117
2. Van Praag et. al, Casting Is Effective for Recurrence Following Ponseti Treatment of Clubfoot. *JBJS* 100(12):p 1001-1008, June 20, 2018. | DOI: 10.2106/JBJS.17.01049