

## OUTCOME OF SUBTALAR ARTHROEREISIS IN PAEDIATRIC FLEXIBLE FLATFOOT

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**Introduction:** Paediatric flexible flatfoot is one of the common foot disorders that raise a significant concern among parents. Majority of the flexible flatfoot do not cause pain or functional disability and this condition usually resolves spontaneously with growth within first decade. However, there is a group of severe form of flexible flatfoot who present with pain along the medial side of the foot, sinus tarsi, diminished walking endurance and gait disorders. We present a case of paediatric flexible flatfoot treated with subtalar arthroereisis. This minimally invasive procedure preserves normal foot anatomy better than other surgical interventions such as lateral column lengthening, and medial sliding osteotomy of calcaneum.

**Discussion:** A 7-year-old boy presented with worsening flatfoot for 3 years, and frequent lethargy upon prolonged walking which required rest. His flatfoot did not improve with conservative management such as heel cord stretching and medial arch support. Physical examination revealed bilateral flatfeet with flexible calcaneal valgus which were corrected with tiptoeing. Both heel cords were tight. Weight-bearing foot x rays show apex plantar Meary angle, increased AP talocalcaneal and lateral talocalcaneal angle, increased navicular-cuboidal overlap and increased Moreau-Costa-Bartani angle. He underwent bilateral subtalar arthroereisis and Vulpius procedure without complication. Above knee fiberglass cast was applied for 6 weeks post-operatively. He started normal weight bearing after removal of cast. Both clinical and radiological outcomes were reported to be good. He has no pain during ambulation. Clinical examination showed that there was no excessive talotarsal pronation when applying dorsolateral pressure under the 4th and 5th metatarsal heads. Post-operatively x rays showed improved radiological parameters i.e. improvement of Meary angle, normal lateral talocalcaneal angle and decreased navicular-cuboidal overlap.

**Conclusion:** Subtalar arthroereisis is a feasible choice of treatment for symptomatic paediatric flexible flatfoot. This minimally invasive surgery has good functional and radiological outcomes with low complication rates.