

A Novel Technique for Surgical Repair of Bilateral Brachymetatarsia

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Brachymetatarsia is a rare condition of the metatarsal, and it is estimated to affect only approximately 0.02% to 0.05% of the population. The fourth metatarsal is the most affected. The current treatment options are gradual lengthening with an external fixator or acute lengthening with bone grafting. The goal of this video is to examine the outcomes and complications of this proposed novel technique for gradual metatarsal lengthening via fluoroscopy and a unilateral external fixator. The procedure was performed on a female patient with bilateral congenital shortening of the fourth metatarsus who reported pain with walking, a history of ankle fractures, and poor appearance of the feet. The duration of the lengthening was 11 weeks, and 2 cm were gained after lengthening. After lengthening, no complications were reported. This method of surgical correction, which consists of lengthening of more than 15 mm, is safe, effective, and reproducible. In addition, the technique is minimally invasive, with a potential to decrease complication rates and be as effective as existing techniques.