

Tibia and Fibula Derotational Osteotomy for Internal Tibial Torsion in Patients With Spina Bifida

Hyewon Kim, Folorunsho Edobor-Osula, Kamil Amer

Because most cases of internal tibial torsion spontaneously resolve in patients by age 4 years, nonsurgical management of internal tibial torsion has been shown to be successful; however, persistent internal tibial torsion results in gait abnormalities. This video reviews the definition and diagnosis of internal tibial torsion. Past and current literature on surgical management and outcomes for internal tibial torsion in patients with spina bifida are discussed. The video reviews relevant preoperative radiographs and clinical examination findings indicative of surgical management. The surgical technique for distal tibia and fibula derotational osteotomy with percutaneous pin fixation is then described in a stepwise manner. The video reviews outcomes, showing postoperative radiographs and comparing preoperative gait with much improved postoperative gait.