

روحاء الساق متأخرة البدء: نتيجة التصحيح باستخدام إطار تايلور الفضائي

Late onset Tibia vara: Outcome of correction using Taylor spatial frame

Background: Technically demanding surgical osteotomies have been described for the management of the late-onset tibia vara deformity, which is frequently problematic to treat as it is often associated with deformities other than varus knees and morbid obesity.

Aim of work: Results of Taylor Spatial Frame (TSF) correction with simple percutaneous transverse proximal tibial corticotomy for the management of late onset tibia vara in late adolescence and early adulthood are presented.

Patients and Methods: A prospective study in fourteen lower extremities in eight consecutive patients with late onset tibia vara were managed with TSF. Pre and postoperative clinical and radiographic assessment were conducted. Percutaneous simple transverse high tibial corticotomy just below the anterior tibial tuberosity, and mid shaft fibular osteotomy was performed in all extremities and gradual correction of angulation and rotation was performed.

Results: The mean age of the patients at the time of surgery was 19.3 ± 4.3 years, all developed the varus deformity during late adolescence, and the mean follow up was 7.7 ± 2.8 years. The mean fixation time was 4.9 ± 2.6 months, the mean mechanical axis deviation improved from 107.7 mm varus to 0.1 mm valgus, the mean mechanical medial proximal tibial angle had increased from 73.6° to 92.9° to compensate for the distal femoral varus deformity, and the mean thigh foot angle had improved from -12.8° to 17.5° . All patients developed one or more superficial pin-track infections. All extremities were pain-free at the time of the final follow-up with no restriction of knee joint range of motion, and all patients were satisfied with the aesthetic and functional outcome.

Conclusion: TSF with percutaneous transverse high tibial corticotomy just distal to the anterior tibial tuberosity is a simple procedure, able to address the angular and rotational component of the deformity resulting in resolution of symptoms and does not seem to have a negative effect on joint range of motion.