Femoral Varus Malunion: A Case Report on Outcome Post Monolateral Fixator Correction

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INTRODUCTION:

Adult limb deformity is a condition that can be caused by trauma, fracture mal or non-union, childhood growth impairment and many others. Some of the common symptoms include pain, abnormal gait and loss of function. Treatment can be either conservative or through operation, either internal or external corrective surgery. Correction of deformity by monolateral fixator is one of the options.

REPORT:

A 52-year-old lady presented to clinic with left knee pain. She encountered motor-vehicle accident when she was 12 years old and sustained left mid-shaft femur fracture. Patient underwent plating of left femur but complicated with mal-union post removal of plate. Initially, patient received hyaluronic acid and plateletrich plasma injection over left knee under Sports Clinic but symptoms persist. In Orthopaedics clinic, noted patient left lower limb was shortened by 3.5cm as compared to contralateral side. Scanogram of bilateral lower limbs showed 30 degrees of varus deformity over left femur and features of osteoarthritis over left knee. The decision for surgery with external device was made. Osteotomy and advanced monolateral fixator over left lower limb were performed. Correction of translation was done one month later, followed by dynamization four months later. During follow up clinic one year post operation, noted limb-length discrepancy and varus deformity reduced to acceptable value. The mechanical alignment of both lower limbs was rather comparable. Besides, left knee pain has improved as well.

Figure 1: Scanogram of bilateral lower limbs taken on first visit

Figure 2: Scanogram of bilateral lower limbs taken on one year post operation

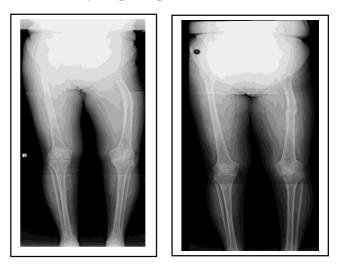


Figure 1

Figure 2

CONCLUSION:

Distraction osteogenesis using a monolateral fixator is a safe and effective treatment option for correction of femoral varus malunion and limb-length discrepancy.

REFERENCES:

1. Myers, D. (2022, March 6). *Adult limb deformity & correction*. Orthobullets. Retrieved March 14, 2023, from https://www.orthobullets.com/recon/422974/adu lt-limb-deformity-and-correction