

## **Correction the Appearance of Patients with Genu Varum Applying Minimal Invasive Method: Fat Graft**

***Tugba Gun Koplay, MD; Osman Akdag, MD; Mehtap Karamese, MD; Muhammed Nebil Selimoglu, MD; Zekeriya Tosun, MD***

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**INTRODUCTION:** Many osteotomy methods and fixation types have been used to correct the misalignment observed in genu varum. The aim of this study is to present our experience of application fat graft for treatment of genu varum.

**MATERIALS AND METHODS:** We report on our treatment of 6 limbs in 3 patients (age range, 19-36 years). In each case we applied fat graft at the medial side of the limb 150-175 cc. There were minimal deformity (Langenskiöld stage 1), patients had only aesthetic complaint, not pain or osteoarthritis. The varus angulation at the tibia was measured and osteoarthritis was evaluated with radiographs. Patient satisfaction was asked. Under general anesthesia, fat graft was harvested from the abdomen. After santrifugation for three times at 3000rpm, fat graft was injected to the medial side of the limb (150- 175 cc for both side)

**RESULTS:** There were no angular deformities in the hip or ankle joint. All patients were 100 % satisfied. The varus angulation at bone did not changed but aesthetic results were good according to two surgeons. The apperaence was good and fat graft was enough at 1th, 3th and 6th month after surgery.

**CONCLUSION:** Genu varum is an angular tibia deformity. Major surgeries like osteotomies , external fixator, epiphizyotomies are options of genu varum treatment <sup>1</sup>. Any specific treatment guidelines can not be found in past literatures. This tecnique is a usefull alternative for genu varum with minimal invasive operation without neurovaskuler injury <sup>2</sup>, shortining the leg, osteotomies, non or malunion, plates and screws. Prothesis are another option for correction the deformity but fat graft is a useful, easy, autolougus ,cost effective method for early stage genu varum.

## **REFERENCES**

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