

Modified Supramalleolar Dome Osteotomy

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INTRODUCTION:

The dome osteotomy is a powerful technique for deformity correction of the lower limb. It can be utilized for the correction of coronal and sagittal plane deformities of the distal tibia¹. We report a modification of the standard supramalleolar dome osteotomy by adding an oblique osteotomy of fibula.

REPORT:

A 50-year-old man who was active in sports, presented to us with worsening pain and swelling of his right ankle for 5 years.

Clinical and radiological assessment suggested chronic right ankle lateral ligament injury, medial talar dome osteochondral defect with hindfoot varus deformity.

He underwent supramalleolar dome osteotomy of distal right tibia, oblique osteotomy of the right lateral malleolus and Brostrom-Gould procedure with internal bracing.

Post operative follow up revealed a very satisfied patient with marked reduction of pain with corrected alignment of his ankle.



Figure 2. Post operative X ray images

DISCUSSION:

Results of supramalleolar osteotomies are very promising in terms of functional outcome and pain relief. The reported advantages of dome osteotomy are bone to bone contact that provides optimal stability, reliable primary bone healing at the osteotomy site and talus centered under the mechanical axis of tibia. The oblique osteotomy of the lateral malleolus allows for additional varus or valgus correction of the ankle joint.

CONCLUSION:

Modified dome supramalleolar osteotomy is indeed a viable option to realign the mechanical axis, thereby restoring ankle function.

REFERENCES:

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Figure 1. Preoperative X ray images