

CORRECTION OF SEVERE ANKLE EQUINOVARUS DEFORMITY USING SIX-AXIS ORTHO-SUV EXTERNAL FIXATOR AND ARTHROSCOPIC ASSISTED ANKLE ARTHRODESIS

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INTRODUCTION:

Equinus is the inability of the ankle to perform dorsiflexion, which leads to lower limb compensation or pathology or both. It can be classified based on soft-tissue or osseous causes of joint restriction. Many techniques of correction have been published with varies success rate. This is a case report of severe ankle equinovarus deformity caused by severe soft-tissue contractures secondary to crush injury of foot that was treated with a six-axis Ortho-SUV external fixator, followed by arthroscopic cartilage denudation and ankle arthrodesis

REPORT:

A 43-year-old woman came to our centre post motor-vehicle accident, sustained crush injury of left foot with severe degloving wound. Amputation of 2nd, 3rd and 4th toe and multiple foot. The left foot wound took nearly 1 year to fully healed, but resulting with severe scarring and ankle contracture. Clinically, the left ankle was rigid with 30 degrees of equinus deformity, 10 degrees of hindfoot varus and contracted Achilles tendon.

After discussion with Orthopaedic Advance Trauma Consultant, the patient was planned for correction of ankle deformity using six-axis OSF and arthroscopic ankle cartilage denudation and arthrodesis in one surgery. Intra-operative, fusion of subtalar joint by screw fixation and Achilles tenotomy were done

Figure 1: X-ray Pre OSF Fixation and Ankle Arthrodesis

Figure 2: Photo Post op OSF Fixation and Ankle Arthrodesis

Figure 3 : X-ray Post Correction with OSF



Figure 1

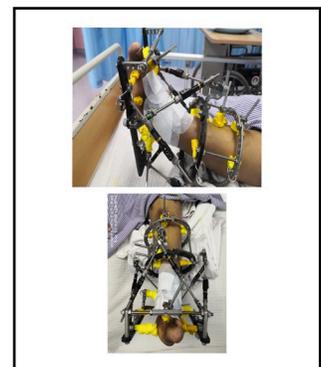


Figure 2

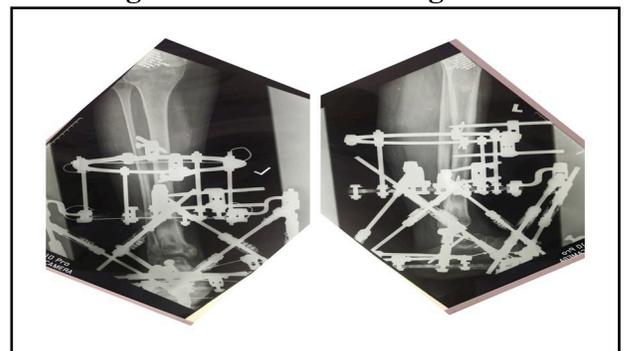


Figure 3

The calculation of correction by hexapod OSF were done using its computer software program. Gradual correction was done throughout 1 month period. The outcome (deformity correction) obtained as per surgeon desired and assessed clinically and by radiograph X-ray.

CONCLUSION:

Gradual deformity correction in severe equinus deformity using OSF with arthroscopic ankle arthrodesis are one of the effective treatment treatment in patients with high risk of surgical wound infection.

REFERENCES:

Zamri AR, Tan JS, Azammuddin A.(2020) Severe equinovarus deformity correction using six-axis Ortho-SUV external fixator and arthroscopic-assisted ankle arthrodesis. Current Orthopaedic Practice 31(3):1