# SPLIT SKIN GRAFT PREDISPOSED TO SKIN INVAGINATION AND BONE PROTRUDED AT DOCKING SITE IN ILIZAROF BONE TRASNPORT

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## INTRODUCTION:

Skin invagination or soft tissue incarceration is a common complication during the late stage of bone transport. However transported bone segment protruded through the skin is rarely reported. We report a case of skin invagination with transported bone segment protruded at docking site in ilizarof bone transport that is predisposed by split skin graft overlying the tibia bone.

#### REPORT:

24Year old man involved with an accident which resulted in open fracture right tibia and fibula Gustilo grade 3B with 9cm tibia bone loss. Multiple debridement surgeries for management of soft tissue defect including the split skin graft overlying the tibia bone. Also he had multiple debridement due to infected non union right tibia. 2years after the accident, ilizarof external fixator was applied with low energy corticotomy at proximal tibia for bone transport. The tibia bone defect post ilizarof external fixator was 12cm. The bone transport was started at day 14 post operation with rate of 1mm per day.

During the bone transport at day 96 during follow up in the clinic, noted skin invagination and transported bone segment protruded at docking site (Figure 1). Patient underwent soft tissue release and iliac bone graft at docking site. Y shape full thickness soft tissue release was performed. We inspected the wound at day 3 and the skin was clean, cover the transported bone segment and healthy (Figure 2).

Figure 1:



Figure 2:



### **CONCLUSION:**

Split skin graft overlying the tibia bone predisposed to the skin invagination and bone segment protruded at docking site in ilizarof bone transport. Soft tissue release at the docking site is an effective way to treat skin invagination and bone protruded in bone transport.

## **REFERENCES:**

- 1. Paley, Dror et al. Journal of Orthopaedic Trauma, Ilizarov Bone Transport treatment for tibial defects, issue: volume 14(2), february 2000, pp 76-85
- 2. Hafiz MHM et al. international journal of allied health sciences, invaginated skin release of docking site under walant; obstacles during covid-19 pandemic, vol 5 no 4 (2021)