

Fibula Internal Bone Transport Following Traumatic loss: SASMEC Experience

¹M Faieq, MR; ¹Nazri MY; ¹A Fadzli S, ¹Lim WK; ¹N Fauzan; ¹Sarah M

¹Orthopaedic Department, SASMEC @IIUM, Kuantan, Pahang, Malaysia.

INTRODUCTION

Lateral malleolus is an important part of ankle stabilizer. Management of distal fibula bone loss remains inconclusive. Other management include stabilization of the ankle with arthrodesis and ligament reconstructions. In traumatic setting, preservation and achieving normal anatomy is the main goal. This report a case which was managed with fibula internal bone transport with olive wire and foot frame.

REPORT:

A case of 16 years old male involved in motor vehicle accident where he sustained open fracture of right distal fibula with fibula bone loss and large soft tissue lost. He initially underwent wound debridement and application of external fixator with foot frame. Subsequently after the wound was suitable with good granulation tissue, internal fibula bone transport with olive wire and SSG was done.

The fibular osteotomy was done about 10cm from the fracture site. An Olive wire was applied just proximal to the fracture site and attached to a slotted rod which applied to the foot frame. Bone transport was achieved by patient turning the nut 8 times per day which equal to 2mm per day. After 3 months of transport, the olive wire cut through the fibula thus causing the transport to stop. The transported segment consolidated about 3cm. The foot frame was removed after 4 months and ankle brace was applied. The patient able to weight bear with the brace.



Figure 1

Figure 1: Preoperative Xray

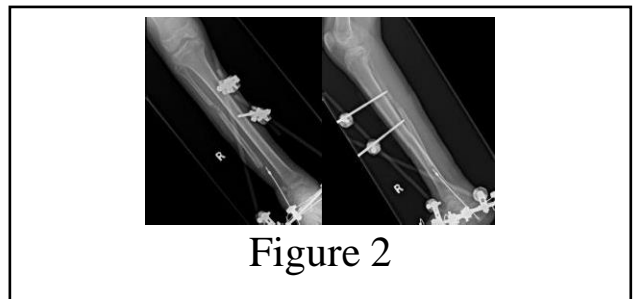


Figure 2

Figure 2: Postoperative Xray

CONCLUSION:

Internal bone transport with olive wire provides a good portion of cortical bone without devascularizing the bone. In the presence of large soft tissue damage, smaller device might be advantageous for wound healing. However, a more stable fixation to the bone is required such as mounting device or addition of multiple wires.

REFERENCES:

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