

## FEMORAL LOCKING PLATE AS PROVISIONAL TIBIAL EXTERNAL FIXATOR. FOCUS ON THE INDICATIONS AND PRESENTATION OF A SINGLE DEPARTMENT EXPERIENCE.

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### INTRODUCTION

The use of locking compression plates (LCP) as external fixation is a known solution both in upper and lower limb trauma. The leg is the main area of application due to the subcutaneous position of the tibia. LCP's can be used as definitive fixation in tibia fractures with compromised soft tissue envelope as well as for stabilization during bone transport with the addition of an ex-fix. As temporary fixation they can be used in the acute setting until soft tissues settle and then be replaced by internal fixation as part of a staged protocol.



### MATERIALS AND METHODS

Application of 3 femoral plates in 2 patients. The first was a case of temporary bridging of a chronic septic proximal tibia non-union. The patient underwent subsequent bone debridement, application of autograft and stabilization with a mono-lateral rail external fixator (LRS). The second patient had bilateral proximal tibia lengthening via LRS, with loss of distal fixation on the left side and pin track infection. On the left side the patient had removal of LRS and temporary maintenance of reduction with a femoral LCP used as ex-fix until soft tissues settled. Then the patient underwent bilateral suprapatellar tibial nailing, with use of a femoral LCP on the right side as temporary bridging between proximal and distal fragments. The LCP's were removed after passing the nail's guide wire.



### RESULTS & CONCLUSIONS

Femoral LCP's in our experience have provided adequate temporary stability as part of a staged management of proximal tibia complications or as an intraoperative reduction tool. The principles of regular ex fix application must be born in mind. Namely, application of a rigid plate (femoral in our case series) as close to the skin as possible, with adequate spacing of the screws in the two fragments (near - near, far - far principle), and leaving a clear path for further fixation in the case we use it as an intraoperative reduction tool.