

OUTCOME OF SUPRACUTANEOUS PLATING OF TIBIA AND FEMUR

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INTRODUCTION:

The management of open fractures complicated with non union is challenging. The aim of this study is to determine the union rate of supracutaneous plating in our centre.

METHODS:

This is a retrospective study with prospectively collected data. All patients with non union open tibia and femur fracture between 2020 and 2023 were included in this study.

RESULTS:

There were 26 patients (Males 18, Females 8). The mean age was 46.4 (range, 35-58) years. There were 15 patients with Gustillo Anderson (GA) 2 and 11 patients with GA 3A fracture. Mean time to union was 4.5 (range 0–7) months. 18 patients had iliac bone grafting. 4 patients had Bone Morphogenic Proteins (BMP) done. 3 patients developed superficial infection at screw site (11%). 16 patients underwent single stage surgery and 10 patients underwent 2 stage surgery where bone grafting was done during the second stage. All patients that were under our follow up including the ones who developed superficial screw site infection achieved union by 7 months.

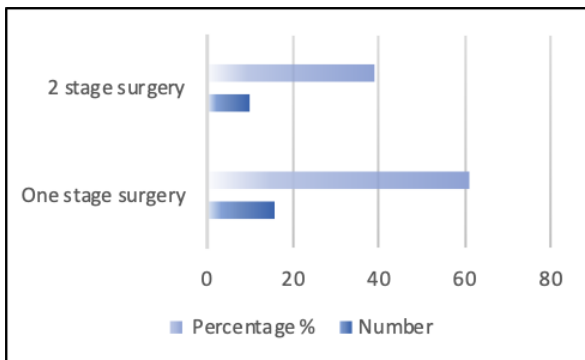


Figure 1: Single stage vs 2 stage surgery

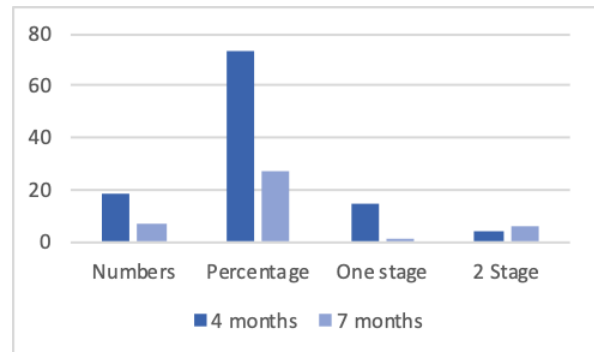


Figure 2: Time to union post supracutaneous plating

DISCUSSIONS:

73% of patients developed union within 4 months and 27% of patients developed union at within 7 months. 61% of patients underwent only single stage surgery and 39 % of patients underwent two staged surgery.

CONCLUSION:

This study shows that supracutaneous plating is a good alternative to non union fracture management

REFERENCES:

Nicetto T, Longo F. Supracutaneous plating using a locking plate for the treatment of a tibial fracture in a cat. *Can Vet J.* 2017 Jun;58(6):585-590. PMID: 28588330; PMCID: PMC5432146.