DEFINITIVE TREATMENT FOR OPEN SUPRACONDYLAR FEMUR FRACTURE WITH ILIZAROV EXTERNAL FIXATOR: THE UNION OUTCOME

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ABSTRACT

Introduction: Supracondylar femur also part of distal femur. 10% of fracture occur at this region presented as a open fracture. The challenge of management in this open fracture, mainly regarding the severity of wound and the fracture comminution with intra-articular involvement.

Methods: Ilizarov circular external fixator was opted as a primary fixation for treatment open supracondylar femur fracture in Hospital Tuanku Jaafar, Seremban, Malaysia, from June 2018 till December 2019. Modified RUST scoring was calculated to interpret the union and fracture healing base on serial plain radiograph post operatively.

Results: 16 patients underwent primary fixation with Ilizarov circular external fixator. 9 patients showed union base on Modified RUST with minimum score of 11 and maximum score of 16 interpret as fracture healing but 7 patients was not. The fracture union and healing start achieved at 6 months to 12 months duration post operatively.

Discussion and Conclusion: Primary fixation with Ilizarov circular external fixator gave more stability to allow early ambulating and weight bearing. It can prevent recurrent deep infection, non-union and internal implant fixation failure. Studies used Modified RUST scoring system was found had sufficient to interpret the fracture healing. Ilizarov Circular external fixation was a good option for primary fixation in open Supracondylar femur fracture and Modified RUST in plain radiograph able to help to determine the fracture healing.