EVALUATION OF THE OUTCOME OF ARTHROSCOPIC ASSISTED FIXATION OF SCHATZKER II, III LATERAL TIBIAL PLATEAU FRACTURES

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INTRODUCTION

Fractures of the tibial plateau represent only 1% to 2% of all fractures but account for approximately 8% of fractures occurring in the elderly. They follow a bimodal distribution and typically involve either active young patients after high-energy trauma or older osteoporotic patients after falling down.

Themechanismofinjuryisverycomplexandusuallyisacombinationofrotational and axial compression forces; these fractures are often associated with intra-articular lesions and soft tissue damage such as chondral damage, meniscal tear, and ligaments rupture.

The main goals of treatment of tibial plateau fractures are to restore joint congruity, restore alignment of articular surface, re-establish the knee joint stability, recreate proper knee alignment, and allow for early knee range of motion.

Arthroscopy is a valuable tool for the treatment of tibial plateau fractures. It was first described in the 1980s, Compared to ORIF this technique allows direct and better vision of articular surface reduction, joint lavage and removal of hematoma and small fracture fragments through a less invasive procedure. It also allows the surgeons to diagnose and treat associated intra-articular soft tissue lesions.

AIM OF THE WORK

The aim of this work was to evaluate the outcome of arthroscopic assisted fixation of tibial plateau fractures (Schatzker II, III lateral tibial plateau fracture) after one year of the surgery.

SUBJECTS AND METHODS

This retrospective study included 20 patients with closed tibial plateau fracture (Schatzker type II & III) treated with arthroscopic assisted reduction and fixation using two cancellous screws with bone grafting after one year of surgery. The results were assessed according to Rasmussen clinical and radiological scores.

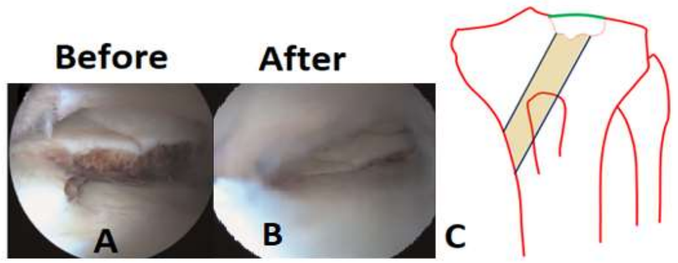
❖Inclusion criteria (uncomplicated)

• Recent. • Skeletally mature. • Closed fracture Schatzker types II, III.

❖Exclusion criteria

• Open tibial plateau fracture. • Associated ligamentous injury.

• Other skeletal fracture. • Schatzker type I, IV, V, VI.



(A) The fragment before elevation, (B, C) after elevation.

Schatzker type III fracture before and after operation and after 1 year post operative

RESULTS

Table 1: Distribution of the studied group regarding radiological score

Radiologicalscore	Number	Percent
Excellent	8	40.0
Good	10	50.0
Fair	2	10.0
Total	20	100.0

Table 2: Distribution of the studied group regarding final clinical score

Clinicalscore	Number	Percent
Excellent	12	60.0
Good	6	30.0
Fair	2	10.0
Total	20	100.0

Table 3: Distribution of the studied group regarding incidence of complications

Complications	Number	Percent
Arthritis	2	10.0
Flexiondeformity	1	5.00
None	17	85.0
Total	20	100.0

Figure: Relation between clinical score and BMI.

CONCLUSION

In this study, we concluded that arthroscopic assisted technique in the treatment of Schatzker type II, III may have favorable result with fewer complications.