A STUDY ON FUNCTIONAL AND RADIOLOGICAL OUTCOME OF COMPLEX TIBIAL PLATEAU FRACTURES BY POSTEROMEDIAL PLATING

Abstract

INTRODUCTION;

In orthopaedic practice three column concept and fixation for proximal tibia is becoming popular as it was proved that fixation of posterior column is a must for proper weight transmission and stability. This study demonstrates the use of posteromedial surgical approach to the knee in treating patients with complex tibial plateau injuries with a posteromedial column fracture.

AIM;

To study functional and radiological outcome of complex tibial plateau fracture by posteromedial plating.

METHODS;

This is a prospective study involving 20 patients with complex tibial condyle fractures with posterior column fractures. Preoperative computed tomography is taken with radiography for complete evaluation of fracture fragments even in coronal plane. Fractures were classified as schtzker type 4 or above with a posteromedial split depression. Plating is done with posteromedial locking compression for buttressing posteromedial fragment. Outcome of surgery was evaluated using Oxford knee scoring system. Longest follow up of study is 2 years.

RESULTS;

All fractures healed within 6 months without any secondary displacements or secondary osteoarthritis. Out of 20 patients 16 patients has postoperative anatomic reduction(0mm step off) 2 had acceptable reduction of <2mm step off. At 4-12 months median range of flexion 135*(125-145*) The mean Oxford Knee Score was 26-46.

CONCLUSION;

Fixation of posteromedial fragment in a complex tibial condyle fracture is a must as it involves posterior column. Using a locking compression plate provides more perfect fracture fixation and thereby more stability to knee joint & better functional outcome. Keywords; Posteromedial plating, three column, proximal tibia, locking compression plate.