

A Case Series of Proximal Tibia Lateral VALCP for Fixing Medial Femoral Condyle Fractures

¹Tiw, Adriel Weijie ; ¹Kuan, ZX ; ¹Afiq, MF ;

¹Orthopaedic Department, Hospital Sg Buloh

INTRODUCTION:

There are many implants of choice to fix a distal medial femur fracture. Open reduction and internal fixation remains as the gold standard for fixing distal femur fractures¹. A biological analysis by *Nicholai et al* comparing medial versus lateral plating in axial loading concluded that medial plating is stronger and stiffer mechanically than lateral in comminuted supracondylar femur fracture¹. There are no anatomical plates available for medial femoral condyle fractures currently².

We are presenting a case series of medial distal femur fractures that achieved anatomical reduction by proximal tibia variable angle locking plate VALCP. An open reduction and medial subvastus approach was used in both cases.

CASE PRESENTATION

CASE 1:

A 48-year-old gentleman sustained bilateral radius and medial femoral condyle fracture post high velocity motor vehicle accident. Calcaneal pin was inserted and a proximal tibia VALCP was inserted with cannulated screw fixation after 5 days. Medial subvastus approach was done for this gentleman to aid visualization of fracture site. Patient able to achieve range of motion of 0-100 within 2 months post operation.



Figure1: Case 1 pre and post operation CT 3D reconstruction and xrays.

CASE 2:

This is a 35-year-old gentleman who sustained comminuted medial femoral condyle fracture

during a motor vehicle accident. Surgeon incharge decided to use proximal tibia lateral VALCP using medial subvastus extensile approach. Intercondylar fragment was visualized and fixed with headless screws. Patient had a wound related infection 2 months post operation successfully treated with antibiotics. Otherwise, patient able to achieve range of motion 0-100 after 3 months.



Figure2: Case 2 pre and post operation CT 3D reconstruction and xrays.

CONCLUSION:

Buttress effect over the fracture site were achieved as proximal tibia plate able to fit anatomically to the medial femur³. The proximal tibia plate is concluded to be a good alternative before an appearance of an anatomical distal medial femur VALCP.

REFERENCES:

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