

Knock! Knock!: An Interesting Case Of Isolated Medial Tibia Plateau Fracture

¹Murthy Selvakumar, ¹Pee Terh Choo, ¹Jian Wei Low, ¹Zulhairi Suraya, ¹Chong Jeffry, ¹Khirusman Yohan

¹Department of Orthopaedics, University Malaya, Malaysia

INTRODUCTION:

An isolated medial tibia plateau fracture has been a rare entity, with depression type even making it rarer! Usual mechanism will be the road traffic accidents. Extreme forces are needed in order to form isolated medial plateau depression since it has thicker and stronger construct of subchondral bone and cartilage. Concomitant injuries may result in this type of injuries and it affects the management and functional outcome.

REPORT:

27-year-old gentleman who was a motorcyclist involved in a road traffic accident, where he was hit by a car towards his right side of the body. Post trauma, he sustained excruciating pain over the pelvis, right thigh and knee region. He was not able to get up and ambulate. Upon arrival to Emergency Department, he was tachycardic with other vital signs being stable.

Tenderness over the pubic symphysis and right hip region elicited, with swollen right thigh and right knee. Portable radiograph showed bilateral acetabular wall fracture with right sided closed midshaft femur comminuted fracture and right medial tibia plateau fracture with depression.

Right knee CT scan was done and showed isolated medial plateau central depression without cortical break. A short surgery was needed for this patient due to his Rhesus negative blood group, which was very limited at the time of surgery. Hence, we treated acetabular wall fracture conservatively.

Patient subsequently undergone retrograde femoral nail insertion and anteromedial Locked Compression Plate (LCP) and bone grafting. Medial approach was made with pes anserine reflected anteriorly. Medial cortical window was made in order for the insertion of the bone graft. Immediate ROM of the knee was allowed post operatively.



Figure A: Plain Radiograph Pre Operatively



Figure B: CT knee Sagittal View



Figure C: Plain Radiograph Post ORIF

CONCLUSION:

As it is known for its rarity, isolated tibial medial plateau depression does not happen without any other concomitant injury, in this case, it was associated with femur shaft fracture. Due to their association with other injuries, it has higher risk for it to go unnoticed which may result in detrimental outcome.

REFERENCES:

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