Open Reduction and Internal Fixation of a Moore Type I Medial Tibial Plateau Fracture-Dislocation

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A Moore type I posteromedial split fracture-dislocation of the proximal tibia is a relatively rare injury pattern. The fracture pattern warrants fixation for several reasons. Fixation of the medial plateau fracture will restore articular congruity, allow for early knee range of motion to minimize the risk of arthrofibrosis, and decrease stress on the healing avulsion fractures of the anterior and posterior tibial spine by maintaining articular surface stability during knee range of motion.

Purpose

This video demonstrates the posteromedial approach for open reduction and internal fixation of a Moore type I medial tibial plateau fracture.

Methods

The anatomy, physical examination, diagnosis, and treatment options associated with the posteromedial approach to the tibial plateau are reviewed. Surgical indications and considerations, including articular surface incongruity and the importance of early knee range of motion to minimize the risk of arthrofibrosis and to decrease stress on the avulsion fractures of the anterior and posterior tibial spine, are reviewed. The case presentation of an 18-year-old woman with a Moore type I medial tibial plateau fracture-dislocation of the knee is discussed.

Results

Moore type I fractures managed via the posteromedial approach allow for direct visualization of the fracture while preserving the medial neurovascular bundle.

Conclusion

Moore type I fractures managed via the posteromedial approach result in reliable postoperative outcomes.