Guest Nation Poster #GN 2

Hoffa Fracture With Patella Incarceration, Associated With Multiligamentary Instability of the Knee in an Elderly Adult: Case Report and Review of Literature

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Purpose: Our objective was to present an infrequent traumatic pathology due to high-energy trauma in an elderly patient and to observe the result after the selected treatment.

Methods: This is a case report and review of relevant literature

Results: A 69-year-old female suffered an axial and indirect trauma to her left knee while trying to stand up to avoid a fall off a scooter (at 30 m/hour). Physical examination revealed effusion, patella outside the femoral trochlea, and valgus instability. Radiographs show a Hoffa fracture of lateral condyle and patella dislocation; the CT scan shows lateral condyle 90° posteriorly rotated, leading to patella incarceration; MRI shows tears in cruciate ligaments, medial and lateral retinaculum. Open reduction and internal fixation were performed, aiming to recover bone stock for an articular replacement. In recent years, there has been a higher incidence of Hoffa fractures in elderly patients, typically associated with supra and intercondylar fractures from low-energy traumas. The interesting aspect of this case is its presentation in an elderly patient with a complex soft tissue injury compromising knee stability. Decision-making is difficult because this patient is old for ligament reconstruction, yet it is also necessary to preserve bone stock for articular replacement. The incidence of similar injuries is increasing due to the activity level of elderly adults and their increasing life expectancy. Therefore, it is necessary to individualize every case to provide the best possible treatment depending on the patient's specific characteristics

Conclusion: The condylar fracture in the coronal plane of the femur, known as Hoffa fracture, represents 8.7% to 13% of all distal femur fractures. Usually associated with high-energy trauma in young adults, there is a small proportion of elderly people who suffer from this type of injury in similar circumstances.