Surgical Management of Episodic Patellar Dislocation in Adults

Professor, Department of Orthopaedic Surgery, University of Lyon, France
Philippe Neyret

The terminology that covers “the condition by a history of one (at least) or more episodes of patellar dislocation confirmed by the patient or the physician and/or a radiographic alteration due to that dislocation (fracture of the medial border of the patella or fracture of the lateral condyle)” includes episodic patellar instability, objective patellar instability, occasional patellar dislocation and episodic patellar dislocation.

The term “episodic patellar instability” (EPI) is still commonly used in the literature and by many orthopaedic surgeons, notwithstanding the fact that instability is a symptom (subjective) and not a disease (objective). H. Dejour pinpointed the different interpretations of instability and distinguished “objective” instability from “subjective” instability. Nevertheless, Objective Patellar Instability (OPI), frequently used in the English-speaking world, still incorporates that sense of subjectivity. Recently “episodic patellar dislocation” (EPD) was introduced by D. Fithian and Ph. Neyret. This new terminology avoids the word “instability” and clearly indicates the history of dislocation(s).

Numerous surgical techniques have been described to address episodic patellar dislocations (EPD). Some of them involve the soft tissues while others primarily address a bony correction.

Four principal anatomical factors have been identified that increase the risk for EPD: trochlear dysplasia, patella alta, patellar tilt and an excessive tibial tubercle-trochlear groove (TT-TG) distance. A treatment algorithm has been proposed to correct each of these factors. It includes the tibial tubercle transfer (TTT), which is able to correct both a patella alta and an excessive TT-TG distance. The tibial tubercle can be transferred distally or medially or more frequently a combination of both. It will realign the extensor mechanism and increase patellofemoral stability. This procedure may be associated with a PMFL reconstruction in case of excessive patellar tilt or rarely with a trochleoplasty for major abnormal patellar maltracking.

Key-Words: patella, osteotomy, dislocation, instability, extensor apparatus, tibial tubercle

All Inside Technique for ACL: Translation Research from Bio-Mechanics to Clinical Outcome

Professor, Department of Orthopaedic Surgery, University of Perugia, and Let People Move, Italy
Giuliano G. Cerulli