Influence of Anterior Cruciate Ligament surgery with semitendinous and gracilis graft on static postural balance at 3 months postoperatively: Randomized controlled study

Florian Forelli,
Orthosport Rehab Center, 6 rue DESCARTES, 95330 Domont, FRANCE

Abstract:
The rupture of the ACL is often traumatic and will cause a disturbance in the stability of the knee, highly requested articulation during the activities of the daily life and during the sport practice. In 2012, 41,000 surgeries were performed in France, mainly affecting young sporting adults and more particularly women [1], therefore making the rupture of the ACL, the most frequent sports pathology [2]. In 2011, a poll found that 26.7% to 43.2% of injuries take place in football and 13.2% to 17.4% during winter sports [3].

Following a rupture, it is recommended to perform a surgical treatment with the objective of restoring the bundles in order to restore the function of the knee by minimizing the symptoms and the risk of complications [4]. The most performed surgery in the world is that of the Gracilis and Semitendinous graft also called STG [5, 6]. 87% of ACL surgery are uncomplicated [7] but it is possible to find joint, muscle, neuromuscular or proprioceptive ... These changes will have an impact in the regulation of bipodal posture [8, 9-11] and unipodal [12-20] statically and/or dynamically. The sports recovery is generally done around six months postoperatively through subjective criteria (answers to questionnaires, absence of feeling of instability) and unspecific [21]. Today, 75.3% of people who have had surgery return to sport at the same level as before the injury and a certain percentage did not recover after one year due to lack of confidence, fear of recidivism, or by a feeling of instability [22].

Biography
Florian FORELLI is a physical therapist specializing in ACL disorders and trauma in athletes. He works at the Orthosport Rehab Center and the Clinic of Domont in France.

Graduated in 2009, Florian FORELLI, quickly moved towards the world of sport. He undertook training in this field in order to acquire expertise and joined the staff of several clubs in football and rugby as well as the French Futsal team in 2011. Eager to do research and teaching, Florian FORELLI obtained his Master’s degree in 2014. He joined many schools of physical therapy and teaches in the fields of traumatology and rheumatology. He continues his university training in the field of physical preparation, movement analysis and clinical research. At the same time, he continued rehabilitation care and decided to specialize in ACL rehabilitation from 2017. That same year, he founded the Orthosport Rehab Center, a center specializing in the rehabilitation of sports pathologies with physical therapists specialized in their field. At the same time, he created OthoLab and became co-director. It is a functional exploration, movement analysis and clinical research unit located at the Clinic of Domont. In this unit, Florian FORELLI assesses 250 patients who have ACL surgery each year through robotic laximetry, isokinetics, postural analysis, gait and running analysis and functional tests.

Publication of speakers: