

## **PAST, PRESENT AND FUTURE IN ACL ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION**

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### **ABSTRACT**

*OVER THE LAST YEARS WE HAD A SHARP INCREASE IN ACL RECONSTRUCTIONS. WE AIMED TO ANALYZE IN RETROSPECT THE TRENDS REGARDING SURGICAL TECHNIQUE AND ORIGINAL RESEARCH BASED ON OUR EXPERIENCE OF 800 CASES.*

*WE BEGUN BY USING THE TRANSTIBIAL TECHNIQUE AND BONE PATELLAR BONE AUTOGRAFTS. THIS WAS THE CURRENT STANDARD LESS THAN 10 YEARS AGO. BIOMECHANICAL STUDIES HAVE FOUND THAT THIS APPROACH DID NOT RESTORE THE ORIGINAL FUNCTION OF THE LIGAMENT. A DIFFERENT, ANATOMIC APPROACH BASED ON THE ORIGINAL INSERTION SITES AND THE TWO BUNDLE STRUCTURE WAS THEREFORE PROPOSED. THIS LED ALSO TO A CHANGE IN AUTOGRAFT AND POPULARIZED THE SEMITENDINOSUS AND GRACILIS. INCONSISTENT RESULTS WITH THIS TECHNIQUE HAS ALLOWED FOR THE ANATOMIC SINGLE BUNDLE – OUR CURRENT STANDARD PROCEDURE – TO SHOW ITS BENEFITS. PROFESSIONAL ATHLETES POSE GREATER CHALLENGES REGARDING EARLY RETURN TO SPORTS AND INTENSE PHYSICAL ACTIVITIES. THE HIGH PREVALENCE OF ACL RECONSTRUCTIONS HAS LED TO AN INCREASE IN SYMPTOMATIC KNEES AND REVISIONS, WHICH LED TO FURTHER CHALLENGES REGARDING REMAINING BONE STOCK AND GRAFT OPTIONS.*

*THE EXPERIENCE GAINED HAS BROUGHT US MORE CONFIDENCE. THIS HAS TRANSLATED IN BETTER OUTCOMES, REDUCED SURGICAL TIME AND*

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*HOSPITALISATIONS. IN ADDITION, THE CONTINUOUS CHANGES HAVE ALLOWED US TO IDENTIFY AND EXPLORE MEANS OF IMPROVEMENT THROUGH ORIGINAL RESEARCH.*

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**KEYWORDS:** ANTERIOR CRUCIATE LIGAMENT, ANATOMIC RECONSTRUCTION, SINGLE BUNDLE