

**Do Patients Failing Return-To-Activity Criteria at 6 Months After Anterior Cruciate Ligament Reconstruction Continue Demonstrating Deficits at 2 Years?**

**Authors:** Zakariya Nawasreh,

**Abstract:** Abstract Background: The variability in outcomes after anterior cruciate ligament reconstruction (ACLR) might be related to the criteria that are used to determine athletes' readiness to return to their preinjury activity level. A battery of return-to-activity criteria (RTAC) that emphasize normal knee function and movement symmetry has been instituted to quantitatively determine athletes' readiness to return to preinjury activities. Purpose: To investigate performance-based and patient-reported measures at 12 and 24 months after ACLR between patients who passed or failed RTAC at 6 months after ACLR. Study design: Cohort study; Level of evidence, 2. Methods: A total of 108 patients who had participated in International Knee Documentation Committee level 1 or 2 sports activities completed RTAC testing at 6, 12, and 24 months after surgery. The RTAC included the isometric quadriceps strength index (QI), 4 single-legged hop tests, the Knee Outcome Survey-activities of daily living subscale (KOS-ADLS), and the global rating scale of perceived function (GRS). Patients who scored  $\geq 90\%$  on all RTAC were classified as the pass group, and those who scored  $< 90\%$  on any RTAC were classified as the fail group. At 12- and 24-month follow-ups, patients were asked if they had returned to the same preinjury activity level. Results: At the 6-month follow-up, there were 48 patients in the pass group and 47 in the fail group. At the 12-month follow-up, 31 patients (73.8%) from the pass group and 15 patients (39.5%) from the fail group passed RTAC, and at the 24-month follow-up, 25 patients (75.8%) from the pass group and 14 patients (51.9%) from the fail group passed RTAC. The rate of return to activities in the pass group was 81% and 84% at 12 and 24 months after ACLR, respectively, compared with only 44% and 46% in the fail group (  $P = .012$ ), respectively; however, some patients in the fail group participated in preinjury activities without being cleared by their therap