Criteria for successful return to sport in athletes after anterior cruciate ligament reconstruction

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Anterior cruciate ligament (ACL) tear is the most common ligament injury among athletes. For successful return to pre-injury status, stabilizing surgery is often advised. After ACL reconstruction, rehabilitation period that athletes need to return to sport, depends on a regular rehabilitation program. Since different criteria advised in various references for successful return to sports after ACL reconstruction and because of the importance of re-injury prevention, present study was performed in order to consider the criteria for successful return to sports after ACL reconstruction. In prospective study 50 athletes with reconstructed ACL, who had the inclusion criteria, were studied. After 6-month period of rehabilitation under control of expert physiotherapist, athletes were evaluated for their readiness to return to sport by these tests: clinical exams for pain, effusion and range of motion, isokinetic and functional tests, including agility and hop tests, and proprioception tests. After 3 months athletes and their coaches were asked about athlete’s readiness status after returning to sport and their condition in comparison to pre-injury condition. This study showed athletes who achieved better scores in isokinetic and functional tests, had better return to sport participation. Also, individuals with better scores in agility, proprioception, and single leg hop test, had better performance after returning to sport. Athletes who had lower intensity of pain during return to sport had more successful outcome. However, there was no significant relationship between knees range of motion and successful return to sport.

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