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Return to Official Italian First Division Soccer Games Within 90 Days After Anterior Cruciate Ligament Reconstruction: A Case Report

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Study Design: Case report.
Background: To present the rehabilitative course, decision-making, and clinical milestones that allowed a top-level professional soccer player to return to full competitive activity 90 days after surgery.
Case Description: The patient was a 35-year-old forward player who sustained an isolated complete tear of the left anterior cruciate ligament (ACL) in the midst of the competitive 2001-2002 season. He was in contention for a position on the Italian World Cup Team that was to be played 135 days after his injury, only if he demonstrated that he could return to play at the highest level before the team was selected. The patient underwent an arthroscopically assisted ACL reconstruction with a double-loop semitendinosus-gracilis autograft 4 days after the injury. Eight days after surgery he began rehabilitation at a rate of 2 sessions a day, 5 days a week, plus 1 session every Saturday morning. These sessions were performed in a pool for aquatic exercises, in a gymnasium for flexibility, coordination, and strength exercises, and on a soccer field for recovery of technical and tactical skills, with continuous monitoring of training intensity.
Outcomes: The surgical technique and the progressive rehabilitation program allowed the patient to play for 20 minutes in an official First Division soccer game 77 days after surgery and to play a full game 90 days after surgery. Eighteen months postsurgery, the player had participated in 62 First Division matches, scoring 26 times, and had received no further treatment for his knee.
Discussion: This case report suggests that early return to high-level competition after ACL reconstruction is possible in some instances. Some factors that may have favored the early return include optimal physical fitness before surgery, a strong psychological determination, an isolated ACL lesion, a properly placed and tensioned graft, a personalized progression of volume and intensity of exercise loads, and an appropriate density of rehabilitative training consisting of a mix of gymnasium, pool, and field exercises. *J Orthop Sport Phys Ther 2005;35:52-66.*

Key Words: *ACL, knee, rehabilitation, semitendinosus*

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The fastest possible safe return to competitive games after anterior cruciate ligament (ACL) reconstruction for a professional athlete is the goal of every sports rehabilitation team. While there is no consensus of opinion about timing,[23,26] surgical techniques, and rehabilitative protocols after ACL rupture, several studies demonstrate that early accelerated and progressive protocols of rehabilitation do not adversely affect functional recovery.[12,13,21,22] The timetable for return to full activity after ACL reconstruction has moved from longer than a year in the 1970s to a range of 4 to 9 months today.[11,12,22,24] Information about resolution of impairments after ACL injury (muscle strength, range of motion [ROM], effusion) is readily available in the literature, but there is little information about how activity affects graft healing.[1,3] While it is clear that immobilization adversely affects healing, appropriate levels of activity to optimally load the graft at