## Research: Low rate of return to pre-injury sport level following knee cartilage surgery

by Kurt Gengenbacher, PT, DPT. OCS, SCS



Recreational and competitive sports can be a large part of our life. When an athlete is injured, it can take a toll on him or her both physically and mentally—especially the big looming questions, "When can I return to my sport?" and "Will I be able play at the same level I did before my injury?" Because no two athletes or injuries are alike, there never has been one definitive answer. However, recent research helps provide us with more insight to help answer those questions.

For ten years, Italian orthopaedic researchers evaluated the clinical outcomes of athletes between the ages of 16 and 29 who underwent knee cartilage repair surgery. The purpose was to study the rate and level of their return to sport. They found that one year after cartilage repair individuals had improved activity levels, but not their peak function until about two to three years post-surgery. These findings are surprising because physicians and physical therapists felt that after orthopaedic repair surgery it took almost 12 months to increase range of motion, strength, balance and endurance, and to fully compete again in sports. Moreover, the athletes in the study never reached their pre-injury level. On a scale of zero to 10, athletes before injury and surgery started around a 9.1 rating. Two to three years after surgery most were at a 7.9 rating.

So, what does this mean for an injured athlete?

With regard to knee cartilage injury repair, athletes improve but may not reach their full functional recovery until two to three years following surgery. Therefore, the healthcare team and athlete must adjust their expectations and continue the rehabilitation much longer than we once anticipated to achieve the highest level of return. Additionally, despite patience and great effort, athletes must be aware that cartilage repair surgery is limited in its ability to return athletes to their pre-injury level of activity.

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