

Young athletes may need one-year break after knee surgery

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After surgical reconstruction of the anterior cruciate ligament, young athletes are now recommended to undergo at least a year's rehab and thorough testing before resuming knee-strenuous sport. Research shows that those who return to sport relatively soon after surgery incur a highly elevated risk of a second ACL injury.

"What's absolutely essential is to let the rehab take time. Every month's wait represents a huge gain," says Susanne Beischer, Ph.D. student at Sahlgrenska Academy, University of Gothenburg, who works as a clinical physical [therapist](#).

An injury the [anterior cruciate ligament](#) (ACL) is the most common form of injury to the knee joint. It mainly affects young players of sports like football, handball, floorball and basketball. In her research, Beischer has focused on adolescents' and [young adults](#)' return to sport after surgery.

Up to 30 percent proved to have suffered a second ACL injury, in the same or the other knee, shortly after returning to their sport. However, there were major differences depending on how long they had refrained from playing.

Strength and hope

Of those who had returned to sport within nine months after surgery of

the cruciate ligament, nearly a third (10 of 33 individuals) were injured again. Among those who waited nine months or more, the proportion suffering a new [injury](#) was considerably lower (8 of 126).

In total, 729 members of the two age groups of sports participants, adolescents (age 15–20) and young adults (age 21–30), were included in the various sub-studies in the thesis. Their rehabilitation in [primary care](#) was individualized by the respective physical therapists in charge.

Of the adolescents studied, half had returned to sport again as usual only eight months after surgery, while the young adults waited longer. Regardless of age group, only a quarter regained their previous thigh-muscle strength and jumping capacity before resuming their sporting activities.

Support and clear information

Young sports participants, especially those below the age of 20, are recommended to extend their rehabilitation to at least nine months—preferably a year or more—and to ensure that their strength and jumping capacity are restored before they return to sport.

To determine whether a person is ready to return, physical therapists are recommended to assess young sports players by using questionnaires and tests of thigh-muscle strength and jumping capacity. This takes place today in the "Project ACL" (Projekt Korsband), in which the University of Gothenburg is an active partner.

"It imposes extreme demands on us as physical therapists. We have to engage, support and create motivation for these people, so that their rehabilitation is completed and we don't let them go back too soon. It's also important for the physical therapist and orthopedist early on, before the operation, to tell the patient that rehab takes time. It's a matter of

having the right expectations," Susanne Beischer says.

Participants in the study were recruited mainly from the Gothenburg region through the physical therapists and/or orthopedists responsible for their treatment.

More information: Gregory D. Myer et al. Rehabilitation After Anterior Cruciate Ligament Reconstruction: Criteria-Based Progression Through the Return-to-Sport Phase, *Journal of Orthopaedic & Sports Physical Therapy* (2006). [DOI: 10.2519/jospt.2006.2222](https://doi.org/10.2519/jospt.2006.2222)

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