

## ACL surgery is not for all patients, nor for all surgeons

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The most typical knee patient seen by me these days is the Norwegian snowboarder, usually in her late teens or early twenties with an anterior cruciate ligament (ACL), meniscal and cartilage injury sustained in New Zealand or Australia this summer training for the Sochi Olympics. The athlete wants to return to the sport as soon as possible—as the games are coming up in February 2014. The athlete is looking for a quick fix. However, my news to them is pretty much not that encouraging. Although I may be able to fix the injury and they might qualify for Sochi, a cruciate ligament injury early in their career in a sport such as alpine skiing events may lead to early OA even with the best treatment and advice. Perhaps if they read the two papers on analysis of the available literature on risk factors and prevention for these injuries in the current *KSSTA* journal, they may have second thoughts on quick return to the same high activity level [1, 2]. However, if they had read a similar paper based on the AOSSM Hunt Valley initiative published in 2005 on “Understanding and Preventing non-contact ACL injuries” [7], they would have seen that science is indeed taking jumps forward. Yes, we do have more, although still not sufficient, knowledge about the risk factors and prevention of these injuries. Unfortunately, athletes do not seem to spend much time on preventive work, although sound data exist on the benefit of adhering to these programs [3]. Perhaps the coaches should make the players spend some time on this type of

literature instead of Play station? [10]. They should, because an ACL injury will cost from Euro 80,000 and upwards depending on the insurance payment. The player will be out for 6–12 months, and 10 years later, if the meniscus is involved, more than 50 % of them will have grade 1–2 (or more) Kellgren–Lawrence radiographic signs of OA [15]. In Scandinavia, according to the knee ligament registries, approximately 6,000 cruciate ligaments are reconstructed each year, the majority are related to sports injuries and, unfortunately, the majority in the age group 16–22 [5, 6]. The surgical findings are similar between Europe and the USA [5, 6]. The athletes’ KOOS score on sport and recreation is approximately 40 points at the time of surgery. Two years after surgery, they may have returned to their sport and have a stable knee, but they do not have a normal knee and their KOOS score in sports is most probably around 70, significantly below the normal population. Granted, these are general ACL patients and athletes spending hours in rehabilitation and training may have a higher score, but this is an early warning sign. Consequently, we need to use the knowledge we have and implement the primary and secondary prevention programs. Perhaps we should not let an athlete return unless they have shown us their willingness and ability to use the preventive programs [9, 14].

It remains to be seen whether the development of new surgical procedures (double-bundle or similar) will improve the long-term results we encounter today. In the meantime, there is no doubt that some athletes can cope without surgery [8, 12, 13]. There are some indications related to non-surgical treatment suggesting that very tough rehabilitation may produce copers, even in sports where pivoting occur [4, 11]. Unlike the surgically treated players, these players know that they have to train extremely hard for their knee to survive and some apparently do [9].

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You should read the new papers on ACL injury prevention and ask yourself how you can use this knowledge in your athlete population. You need to get the coaching staff and the athletes on your side and you need to start early, with the youngsters. It can be done, but demands teamwork. Although not sufficient, using the available science *will* reduce the injuries and their ensuing problems.

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