

## You can make a difference!

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In my office I regularly see soccer players from the best leagues in Europe and who are late in their career. My feeling is that they want to avoid being seen with a “knee doctor” in their own environment and prefer the disguise of little Norway. Their common story is a serious knee injury, and oftentimes they have undergone several surgical procedures. Frequently, their knee injury is the major cause of a premature termination of their sports career, with consequent loss of income and less insurance payment than they would prefer. Their counterpart in the clinic is the Norwegian female soccer player, usually in her late teens or early twenties with an anterior cruciate ligament (ACL), meniscal and cartilage injury, often in combination. The athletes want to return to their sport as soon as possible. They are looking for a quick fix. However, my news to them is pretty much bad ... a cruciate ligament injury early in the career in a sport such as soccer may lead to early osteoarthritis (OA) even with the best treatment and advice. Perhaps if they read Eduard Alentorn-Geli and co-workers’ analysis of the available literature on risk factors for these injuries in the current issue of the *KSSTA* journal, they may have second thoughts on returning quickly. 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” [3], they would have seen that science is indeed taking jumps forward. Yes, we do have more, although not sufficient, knowledge on risk factors and prevention of these injuries. Unfortunately, the soccer players do not appear to spend much time on preventive work, even though good

data exist for the benefit of adhering to preventive programs [1]. Perhaps the coaches should make the players spend some time on this type of literature instead of Playstation? They should because an ACL injury will cost from 80,000 Euro and upwards depending on the insurance payment. The player will be out for 6–12 months and 10 years later more than 50% of them will have Kellgren-Lawrence radiographic signs of OA. In Scandinavia, according to the knee ligament registries, more than 6,000 cruciate ligaments are reconstructed each year, the majority after injury in soccer and, unfortunately, the majority in the age group 16–22 [2]. Their 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 is not higher than 70 points, significantly below the normal population. Granted, they are general ACL patients and soccer players 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 both primary and secondary prevention programs. Perhaps we should not let a player return unless they have shown us their willingness and ability to use these programs.

It remains to be seen if the development of new surgical procedures (double bundle) will improve the long-term results we see today. Perhaps some of these players would do well without surgery. There are some early results on non-surgical treatment suggesting that well-planned rehabilitation may produce copers—even for a sport such as soccer. Unlike the surgically treated players, these players know that they have to train extremely hard for their knee to survive and some apparently do [4].

Read the paper on ACL injury risk factors and ask yourself how you can use this knowledge in your player

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population. You need to bring the coaching staff and the players on your side and you need to start early—with the youngsters. I ask you to also look at the recent BMJ paper by Soligard and co-workers [5]. It can be done, but demands teamwork. Although we do not have sufficient scientific information yet, using the available science *will* reduce the injuries and post-injury problems.

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