



# TIME OUT

*Making the right call on sports injuries*



## *Giving Way to OA*

**Howard A. Winston, MD, CCFP, FCFP, Dip. Sport Med. (CASM)**

George, 36, is a businessman who comes to see you because of what he describes as a “wonkiness” in his left knee. He states that he had a high school football injury to his left knee, but never sought medical attention. Now he comes to you asking why he has ongoing, persistent pain along the inside of his left knee and has noticed some sporadic swelling as well. He expresses concern that a friend of his had osteoarthritis (OA) and required a knee joint replacement and fears that he will need the same operation.

You ask George if he has ever had surgery on his left knee and he confirms for you that he hasn't. Further, you inquire as to whether he has had any radiologic investigations to date. He reiterates that he has never come to a doctor before for his left knee as he fears the potential treatment.

You examine both off his knees so that you can compare

the physical findings. By this comparison, you notice that his left knee is grossly unstable, with no stability from his anterior cruciate ligament (ACL). You also detect some crepitus behind the patella. You are concerned that he has been walking around on an unstable left knee and order x-rays to be reviewed at a later date.

Mr. Peterson returns with his x-rays of his left knee, in both a non-weight-bearing and weight-bearing position. There is evidence of degenerative disease in the retropatellar area and some early medial joint space narrowing.

As soon as George hears the word degenerative, he has booked a total knee replacement surgical procedure in his head. He feels like life, as he has known it over the years from an activity point of view, is now over. Even though you have not mentioned the “A” word “arthritis,” he has sen-

tenced himself to a life of pain, stiffness and surgery.

You explain to him all of his treatment options, none of which include a total joint replacement. You try to reassure him that he does not have to be inactive, but does have to be more selective in the activities that he is involved in. He should be performing activities that involve more of a smooth gliding motion, staying away from sports that involve a lot of hard pounding, twisting and pivoting motions.

There are a couple of significant issues that need to be addressed. The first one is the degree of ligamentous instability that he has suffered over the years. The second issue is the state of the articular cartilage in his left knee, as it has been damaged over the years. You inform him that the purpose of fixing the torn ACL is to help prevent the accelerated development of degenerative joint disease. Since there is



already the presence of degenerative changes, the question now is whether there is any merit in reconstructing the knee ligament when there are already degenerative changes present?

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George has done his own research and asks you a few questions about:

- bracing,
- physical therapy,
- viscosupplementation and
- surgery.

You explain to him that if the knee gives out on a regular basis, it can accelerate the degeneration of the articular cartilage. Bracing the knee will help reduce the degree of instability, but it is not completely effective and it has to be worn all the time (which is not very practical). These custom braces are also quite

expensive. In regards to viscosupplementation, the injections can help with improving the integrity of the articular cartilage; however, it is typically only meant to be used every six months to maintain an improved articular surface.

It is critical that the physical therapy and the exercises that accompany it are continue for life. The question of surgery however, is difficult to answer and can be quite controversial. There is the issue of reconstructive ligament surgery to help stabilize the knee, but this is meant to be done to help prevent the development of degenerative joint disease. Since the patient already has degenerative changes present, it warrants deep thought in determining whether it makes sense to repair the ligament. Unfortunately, there is no definitive answer. Intuitively, you would think that there would be less stress on the joint, over time, if the ligament is offering greater stability for the knee.

George hears all that you have to say and decides to have the ligament reconstructed. He astutely points out that he wants to work hard at getting it strong, before and after

surgery. He will get the customized ACL deficiency brace, which will include a 10 degree to 20 degree extension block, which will prevent full extension of the knee and take stress off the ACL. Lastly, he decided to put off the viscosupplementation. He will have to go through an extensive period of rehabilitation for six months to seven months following surgery. He is now confident of the direction he is headed in and looks forward to getting on with his life.

He ended with an interesting philosophy for a lay person. His view on deciding to have the surgery was based on the fact that he didn't want his knee to give way to OA. Hard to argue with him!

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**Dr. Winston** is an Assistant Professor, Department of Family and Community Medicine, University of Toronto and Medical Director, Centre for Health and Sports Medicine, North York, Ontario.