On a 2-1 count the pitcher hurls a cut fastball toward home plate. As soon as the ball leaves his hand pain flares in his elbow.

As the ball reaches the plate the batter makes contact and hits a sinking line drive down the left field line. Thinking double all the way, he goes from standing still in the box to a full sprint. Rounding first he feels a searing pain in his lower thigh.

The leftfielder breaks hard to his right to cut off the ball before it rolls to the fence. A left-hander, he fields the ball with his gloved right hand and, trying to keep the hitter to a single, spins completely around and fires a shot into second base, feeling a tear in his left shoulder muscle as he does so.

Three injuries in one play? Improbable.

But independently, based on the sudden stop and go nature of the game, these are all common injuries that baseball players are threatened by every day. One method of prevention for muscle and joint injuries that trainers in baseball are turning to is Pilates.

Most conventional workouts tend to build short, bulky muscles – which can be prone to tears, pulls or worse. Pilates develops a strong core or center of the body. It elongates and strengthens, improving muscle elasticity and joint mobility. And, as most trainers know, a body with balanced strength and flexibility is less likely to be injured.

Creating an even musculature

Pilates helps create an even musculature, crucial in avoiding injury and increasing overall athletic performance. Many athletes suffer from muscular imbalances due to the nature of the sport they play and the repetitive movements they make. Nowhere is that example more clear than in baseball, where players torque their bodies in a variety of ways: throwing, swinging, running, diving and sliding. Baseball players are also standing still for periods of time before exploding into a sudden movement - making it even tougher on their musculature.

“Baseball is a very unilateral sport. Players hit from one side or throw from one side for the most part. When you are fielding on the corner infield or outfield you are predisposed to breaking one way or another and that can cause an imbalance,” says Dan Wright, Assistant Trainer and Strength and Conditioning Coordinator for the Milwaukee Brewers. “During the season we really try and look at countering the imbalances that the game creates with our players. Pilates can be a big part of that”.

Wright is heading into his sixth season with the Brewers. A longtime advocate of the principles of Pilates and core strength, he initially found that the exercise method was a relatively unknown entity with the Brewers and most of professional baseball. Then, several years ago some of his players began to experience back problems. The Brewers thought Pilates would be an ideal treatment and sent the players to Pilates-based physical therapists.

“When I came to the Brewers we decided to add some other disciplines as an adjunct to our strength and conditioning program to help our players avoid injuries and increase the players performance,” Wright said. “As we sent the players out to Pilates-based rehab, we found that the results were so positive and the players liked it so much that we began to incorporate Pilates equipment into the conditioning program.”

Core awareness and postural alignment

The principals of Pilates can teach an athlete to work through the core of the body and then through the extremities. The core is considered the deep abdominal muscles, the pelvic floor, the muscles closest to the spine, the hip complex, and use of the diaphragm for proper breathing. Control of the core is achieved by integrating the trunk, pelvis and shoulder girdle.

The exercise emphasizes postural alignment and awareness and teaches a body how to maintain alignment through a specific movement sequence in an exercise. The nature of Pilates’ choreography is a combination of flexibility and strength training with postural awareness and control. This awareness is crucial says Wright.

“Pilates teaches players how the core works and how it should serve as the foundation of almost all extremity movement. Once they understand that and are able to engage their core to actively and dynamically stabilize the body without thinking about it, they’re really at the first level of injury prevention.”

Wright also likes the versatility of the exercise.

“Pilates can be done bilaterally and unilaterally, and it can also be segmented. It has a very broad base of applications and is a very dynamic and versatile form of exercise, whether it is on a mat or apparatus. Once they’ve learned the movements I’ve seen many players really generate suppleness in the joints, muscles and tendons. And from a neurological standpoint it helps to regenerate the proper nerve firing process.”

The Brewers now include apparatus-based Pilates workouts with a Pilates Reformer and chair, as well as mat-work, which the Brewers continue when they are on the road.

A very positive outcome

Overall the program seems to be working for the team. In 2005 the Brewers received an award from Baseball Prospectus as the professional baseball team that had the lowest amount of player time on the disabled list from 2003 through 2005.”

“I think it is fair to say we’ve seen good results. Even in 2006 most of the injuries we had were not chronic, but occurred due some type of trauma impact, which isn’t preventable” Wright says. “Once an athlete grasps the concepts of Pilates and core strength they will likely see a decrease in their injuries and an improvement in performance on the playing field due to more efficient firing status in the musculature. That’s our number one priority.”

Ken Endelman is the CEO and Founder of Balanced Body Inc. www.pilates.com