

I have been closely following the types of injuries that many athletes are getting. They seem to indicate that most teams are still using methods that have not proven to be successful in the prevention of injuries. They seem to be ignoring methods and exercises that have been proven successful in injury prevention, but not on a large scale. I say this because in my practice and with trainers that I mentor, they rarely if ever, get injuries in non-contact sports.

Injuries are such an important issue it is difficult to understand why many teams are not looking for new directions in the prevention of injury. Understand that ball clubs spend millions of dollars a year simply on medical bills, bills that could be eliminated or cut down greatly.

Many teams believe they are doing the right thing in relation to prevention by hiring strength and conditioning coaches and in many cases, physical therapists, to condition athletes to withstand the rigors of the game and to prevent injury. However, they do not appear to be successful at this. Part of the reason for this may be that these individuals do not have a strong background in technique of the skills that the athlete must perform and are rarely capable of technique analysis.

I learned about the importance of technique and the training of an athlete in injury prevention and rehabilitation many years ago in my discussions with the Soviet team doctor during the USSR-USA track and field meets. When watching some of the athletes perform, the doctor was often first in pointing out improper technique that would eventually lead to injury. I later found out that the Soviet doctors, after becoming certified medical doctors, were required to attend the sports institutes to learn about technique and the training of an athlete if they were to work with the national teams.

With this background in technique analysis, the doctor was capable of predicting injuries. In such cases he would tell the coach and they would go through the necessary changes to make the athlete's technique safer and more effective. At times he would be the one to tell the coach how to modify the training. I have never heard of this occurring on the US teams, mainly since no one has such qualifications.

Understanding technique and being able to analyze technique is also necessary in order to create specialized strength exercises that duplicate what occurs in execution of the sport skill. These exercises, also called dynamic correspondence exercises, couple technique with strength. Such exercises have proven to be the key to prevention of injury and at the same time, improving and enhancing the ability of the player to execute the sport skill.

This is the beauty of specialized strength exercises. They duplicate the same neuromuscular pathway and develop strength in the same range of motion as it is displayed or used during the execution of the skill. This is why they are so effective in not only the prevention of injury but improving the ability of the player to execute the skill.

For example, oblique injuries are quite common today. A specialized strength exercise for these muscles is the reverse trunk twist and when more advanced, Russian twist. These exercises duplicate the muscle involvement in rotating the shoulders forward as needed for throwing athletes as well as hitting athletes. But it is extremely rare to find either of these exercises being done on the high school, collegiate or professional level.

When you do find coaches using one or both of these exercises they are usually executed ineffectively. For example, doing the Russian twist when seated on the floor or on a medicine ball, does not allow for a full range of motion or intensity, but can be potentially dangerous. Understand that exercise technique is very important. It must duplicate the same technique as seen in gameplay as well as the same muscle involvement!

Thus it should be obvious that in order to not only prevent injury but to enable the player to execute his skills more effectively and with more power, it is necessary to combine or couple technique with strength. This is the basis of specialized exercises, which as should be obvious, are the most important exercises that a player can do after establishing a strength base. Specialized strength exercises have an immediate effect on performance. But because they are not well known, are not widely used in the training of most players.