



Wrestling Injuries in Young Athletes

BY: **Bill Primos, MD**

Wrestling is a sport in which two individuals struggle hand to hand with each other and attempt to subdue their opponent. The sport was developed more than 3000 years ago. It was popular among the ancient Greeks and was an important part of the original Olympic Games.

There are two basic styles of wrestling, Greco-Roman and freestyle. Both styles are modern Olympic sports. Greco-Roman wrestling is based on the style used in ancient times. In this type, only holds above the waist are allowed. In freestyle wrestling, holds below the waist are permitted. Freestyle is the style currently used in high school and college wrestling.

The number of individuals that participate in wrestling in the U.S. is estimated to be between 400,000 and 750,000. Injuries are very common in wrestling. Studies have shown that wrestling ranks second behind football in injury rates among high school male athletes. The most commonly injured joints in wrestling are the knee and shoulder. This article will discuss a few of the most common injuries found in wrestling.

Treatment of a torn meniscus is with rest. Crutches should be used to keep weight off the knee if walking is painful. Sometimes a small tear in a meniscus can heal with rest. If the tear does not heal, surgical treatment may be needed. Surgery is performed using an arthroscope to either repair or remove the torn meniscus.

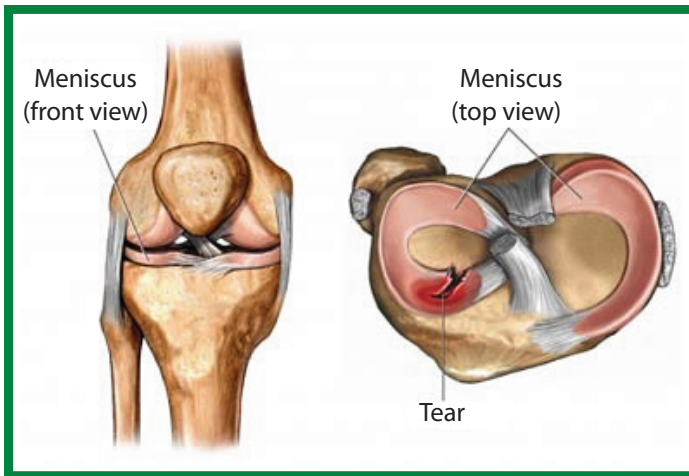


figure 1

A common knee injury that occurs in wrestling is a **torn meniscus** (figure 1). The meniscus is a type of cartilage found in the knee. It is a rubbery tissue that serves as a cushion between the thigh bone (femur) and the shin (tibia). A meniscus can tear during wrestling when the knee is twisted or while the person is squatting. Symptoms in a patient with a torn meniscus include pain, limited motion, and swelling of the joint. The knee may occasionally lock up or become stuck in place. There may be tenderness along the joint over the torn meniscus. Radiographs may be taken to rule out damage to the bone, but a torn meniscus will not be visible on a plain x-ray. An MRI scan is used to confirm the diagnosis.

Prepatellar bursitis is an irritation of the bursa in the front of the knee over the kneecap (figure 2). A bursa is a sac that acts as a cushion between the bones, tendon, and skin. If the bursa becomes inflamed it produces fluid and swells. Prepatellar bursitis is very common in wrestlers and can result from a direct blow to the front of the knee or due to chronic friction from frequent kneeling. Symptoms of prepatellar bursitis are painful swelling over the front of the knee. The swelling is not inside the knee, but between the kneecap and the skin. There may be pain and stiffness when bending the knee.

This condition is treated with frequent application of ice packs for 20 or 30 minutes every 3 to 4 hours. Elevation of the knee may decrease the swelling. Anti-inflammatory medication can also help. If the bursa is very swollen, the fluid may need to be drained. Sometimes the fluid inside the bursa becomes infected. In these cases, the knee becomes even more painful and is hot and red. To properly treat infected bursitis, the fluid must be drained. Antibiotics are also used to treat the infection. Prepatellar bursitis can be prevented by avoiding direct pressure or blows to the kneecap. Wearing proper kneepads can also prevent the irritation.

Another type of injury in wrestling is a **dislocated shoulder** (figure 3). This may happen when the arm is pulled up or backwards and forced out of the socket. It may also occur when falling on the shoulder or onto an outstretched hand. The upper arm bone

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(humerus) fits into the shoulder socket (glenoid). The joint is held in place by soft tissue stabilizers which include the labral cartilage, the capsule composed of connective tissue, and the rotator cuff muscles. In a dislocated shoulder these tissues are stretched or torn. The main symptom is severe pain that is worsened by movement. The end of the upper arm or humeral head may be seen as a lump sitting outside the shoulder joint. There may be numbness in the upper arm due to stretching of a nerve that occurs during the dislocation.



figure 2

Treatment of a dislocated shoulder is by a medical provider who attempts to put the arm back into the joint. After the shoulder is put back into the joint the pain level is greatly reduced. The shoulder is immobilized in a sling to prevent movement and aid healing. Intermittent application of ice helps decrease pain and swelling. After a period of rest, physical therapy exercises are prescribed to stabilize the shoulder and hopefully prevent recurrent dislocations. In some cases surgery may be necessary, especially if the shoulder continues to dislocate.



figure 3

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