The Wrestlers Shoulder

Because of the extreme flexibility requirements and tremendous forces applied to the body, it is very common for wrestlers to sustain shoulder injuries of many kinds. The “shoulder” is actually made up of four different articulations, or joints:

1) The glenohumeral joint – this is the well-known “ball and socket”. It is made up of the proximal humerus (ball) and the glenoid (socket). It has a wide range of motion, but this motion leads to a high risk of instability.

2) The acromioclavicular joint – otherwise known as the A-C joint. It is the bump we all have at the top of our shoulder where the very end of the collarbone meets the acromion at the tip of the shoulder. There are two sets of ligaments that stabilize this low-motion joint.

3) The sternoclavicular joint (S-C joint) – this is where the other end of the collarbone meets the breastbone (sternum). This is one of the most stable joints in the body, but wrestlers still manage to sustain injuries to it.

4) The scapulothoracic articulation – This is where the shoulder blade (scapula) meets the back part of the ribcage on the chest (thorax). By strict definition this is not actually a joint, but weakness in this region can dramatically increase the risk of injury to the other shoulder joints described above.

Common shoulder injuries in wrestlers

Shoulder dislocations, with subsequent shoulder instability, is a common and disabling injury for wrestlers. A shoulder dislocation is when the “ball” pops out of the “socket”. This usually happens when the shoulder is in extreme overhead positions. It is associated with a dramatic clunk and typically severe pain. The wrestler is often unable to move the shoulder at all. This is an orthopedic emergency, and needs to be put back in place immediately to avoid further damage to the shoulder. Even if the shoulder pops back into place by itself, the shoulder should be evaluated by a health care professional before returning back to wrestling. This injury often leads to recurrent instability with many more dislocations unless it is surgically fixed. Wrestlers may return to their sport without surgery, but an x-ray or MRI should be obtained to ensure that there was no fracture at the time of dislocation.
Shoulder separations are the most common shoulder injuries in wrestling. This is an injury to the ligaments around the A-C joint. It typically happens when the top of the shoulder is driven into the mat. It is usually associated with severe pain right at that joint and may sometimes be seen with a large bump at the top of the shoulder, but not always. This is almost always treated without surgery. The wrestler is allowed to return back to sport when there is a full range of motion of the shoulder with normal strength. Depending on how severe the damage to the ligaments, this could be anywhere from 3 days to 3 months. Physical therapy can dramatically reduce a wrestler's down time with this injury. X-rays should be obtained within 24-48 hours after the injury to make sure that there is no fracture.

Sternoclavicular joint injuries, while much less common, can have devastating impact on contact athletes. These usually occur when an extended arm is pulled back behind the body. It can also occur by a direct blow to the collar bone. There is usually a sharp pain right where the collar bone meets the chest. There may or may not be a bump noticed there at the time of injury. This side of the collarbone still has a growth plate until the age of 26. This growth plate is very susceptible to fracture. If wrestlers continue to compete with a fracture at this site, they are at risk for the collarbone to be pushed back into the lung or into the major blood vessels in the chest. These are catastrophic consequences that must be avoided. If an injury is suspected in this area, the athlete needs a thorough evaluation by a sports medicine clinician. It is often difficult to diagnose these fractures with x-rays alone. A CT scan or MRI scan is usually performed. Once healed, wrestlers can expect to return to their sport without difficulty.

Prevention of shoulder injuries in wrestling

While shoulder injuries are a common occurrence in wrestling, there are steps that can minimize the risk of them happening. There are 17 muscles that attach to the shoulder blade and span the 4 joints described earlier. If these muscles are strengthened appropriately and trained to work in the proper rhythm it can dramatically increase shoulder stability and avoid injury. Wrestlers commonly overdevelop the front part of their shoulders. Commonly known as the “beach muscles”, the front muscles include the pectoralis muscles, the deltoids and the biceps. If these are overdeveloped it creates a severe imbalance in muscle function and results in a shoulder-forward posture with increased risk of injury. This can be corrected by focusing on the muscles in the back of the shoulder including the latissimus (lats), the trapezius, the rhomboids, and the serratus anterior. If you are unfamiliar with how to train and coordinate these muscles a physical therapist can help direct you on the proper training regimen to achieve this. A strengthening program must be adhered to throughout the season as well, avoiding strength loss as your season progresses is very important for injury prevention.

Dr. Philip Schrank, MD is a Board Certified Orthopedic Surgeon & Sports Medicine Specialist. He is Fellowship Trained in sports medicine at the world renowned Kerlan-Jobe orthopedic clinic. Dr. Schrank can be reached at OALI - Orthopedic Associates of Long Island, by calling 631-689-4161. He sees patients at 6 Technology Drive, East Setauket and 475 East Main St, Patchogue. Athletes “IN SEASON” are always given priority appointments.

Information is intended for general information and educational purposes only and is not designed to replace an evaluation, care & diagnosis by your physician.