What is it?
An SC sprain is an injury to the joint where the clavicle (collarbone) meets the sternum (breastbone). These injuries are rare, requiring an accident with a lot of force, such as a tackle in football or rugby. Most SC sprains occur when an athlete is struck on the back or side of the shoulder. Typically, the resulting injury is a sprain, but it is also possible to dislocate the joint. The clavicle can be dislocated forwards or backwards with regards to the sternum. Dislocating the clavicle backwards can be very dangerous, as blood vessels, nerves, the trachea (windpipe), and the esophagus are located behind the clavicle and sternum.

Symptoms
- Shoulder pain
- Clavicle or sternal pain
- A bump or divot at the site of joint between the clavicle and sternum
- More severe symptoms, like difficulty breathing or swallowing, may occur if the clavicle dislocates backwards

Sports Medicine Evaluation & Treatment
Athletes with a suspected SC sprain should be evaluated by a physician. A sports medicine physician will perform a thorough history and physical exam and determine the source of the pain. X-rays may be obtained, but they may not be able to evaluate the full extent of the injury, so further testing like a computed tomography (CT) scan or magnetic resonance imaging (MRI) may be necessary.

For an SC sprain, treatment may include icing, inflammation and/or pain control with medications like ibuprofen and acetaminophen, and using a sling or a brace.

If a dislocation occurs, treatment and its degree of urgency depends on which direction the clavicle is dislocated. If the clavicle dislocates forward, the physician may opt to try and put it back in place, but more often this injury can be adequately treated with a sling or a brace. For a clavicle dislocated backwards, there is a higher likelihood that surgery will be required. This is especially true in cases where an athlete experiences difficulty breathing, and in this case, should be managed as a true emergency.
Injury Prevention
There is nothing specific an athlete can do to prevent an SC sprain. That being said, all athletes should be well trained and conditioned in order to be best prepared for safety and success in the sport of their choosing. Specifically, athletes participating in contact sports would likely benefit from exercises designed to improve shoulder and chest wall strength.

Return to Play
For an SC sprain, most athletes can return to play when their pain is well controlled, and strength and range of motion is normal in the arm on the affected side. Adequate time to allow the supporting tissues of the SC joint is necessary to prevent long-term complications like pain and instability. The exact time period that this will happen varies from person to person, depending partially on the severity of the sprain. Return to play may be accelerated with a structured rehabilitation program.

AMSSM is a multi-disciplinary organization of sports medicine physicians dedicated to education, research, advocacy and the care of athletes of all ages. The majority of AMSSM members are primary care physicians with fellowship training and added qualification in sports medicine who then combine their practice of sports medicine with their primary specialty. AMSSM includes members who specialize solely in non-surgical sports medicine and serve as team physicians at the youth level, NCAA, NFL, MLB, NBA, WNBA, MLS and NHL, as well as with Olympic teams. By nature of their training and experience, sports medicine physicians are ideally suited to provide comprehensive medical care for athletes, sports teams or active individuals who are simply looking to maintain a healthy lifestyle. Find a sports medicine physician in your area at www.amssm.org.

AMSSM Member Authors: Kyle V. Goerl, MD; Cindy J. Chang, MD

References


