Background: We present a unique mechanism of injury for a common orthopedic injury involving a competitive intercollegiate participant. A 20 year-old male intercollegiate football participant presented to the Athletic Trainer after a morning conditioning session with severe acute anterior right shoulder pain accompanied by respiratory distress and pain while coughing secondary to running into a wall. The initial clinical evaluation revealed severe swelling over the proximal clavicle making the anatomical contours around the area undetectable. The patient would not permit the Athletic Trainer to palpate the area due to the pain. The patient's medical history is not significant for injuries to the involved shoulder or surrounding area.

Differential Diagnosis: sternoclavicular sprain, clavicle fracture, brachial plexus pathology, costochondral separation, and costosternal separation. Treatment: After the initial evaluation by the Athletic Trainer, the patient was iced, placed in a sling, and referred to the team orthopedic surgeon for further evaluation. The physician’s evaluation revealed severe tenderness over the right sternoclavicular joint with anterior hypermobility. The neurovascular bundle posterior to the clavicle was within normal limits and the patient’s vitals were stable with no reported symptoms of respiratory distress. Plain film radiographs findings indicated the right glenohumeral joint, acromioclavicular joint, clavicle, and upper hemithorax were unremarkable but identified a sternoclavicular joint malalignment. The patient was diagnosed with a grade III anterior sternoclavicular sprain. Initial management began with removal from athletic participation and continued application of cryotherapy and the use of the shoulder sling. The patient was prescribed a two week course of an oral anti-inflammatory medication. A six week rehabilitation program began with controlling pain and inflammation to allow the sternoclavicular joint to adequately scar and heal. During this time, the Athletic Trainer incorporated therapeutic exercises to maintain and improve range of motion and neuromuscular control of the shoulder girdle. The patient progressed to performing exercises designed to improve muscular strength, endurance, and power. The patient was cleared by the team physician and returned to athletic activities approximately six weeks post injury. The patient’s return to activity did not elicit any pain or apprehension. Uniqueness: A sternoclavicular sprain is commonly seen from direct forces to the shoulder or indirect forces to the shoulder such as a fall on an outstretched hand. This case is unique because the patient suffered a grade III sternoclavicular sprain as a result of the patient attempting to brace himself from crashing into a wall. This created enough force to displace the proximal clavicle in superior, anterior, and medial directions disrupting the costoclavicular, anterior sternoclavicular, and posterior sternoclavicular ligaments. Conclusions: The grade III anterior disruption of the clavicle from the sternum in this case resulted from an unusual indirect force to the anterior portion of the shoulder. The force from this blow was transmitted through the distal extremity to the sternoclavicular joint, resulting in a disruption of the ligamentous stability of the joint, allowing the proximal end of the clavicle to displace medially, anteriorly and superiorly. Symptoms of this injury included swelling and tenderness over the right sternoclavicular joint, pain while breathing and coughing, and pain at the end ranges of shoulder flexion and abduction. Grade III anterior sternoclavicular sprains can result from not only falling on an outstretched hand but also from an individual bracing themselves while running into a fixed object. Word Count: 548