Pancreatic Laceration in a Division I Soccer Player
Tropeano M, Perkins S, Sullivan R, Hart K; Marist College Poughkeepsie, NY

**Background:** A seventeen year old female soccer player at a Division I College sustained a direct blow to the right upper quadrant of her abdomen during an away soccer game. Her chief complaint was difficulty breathing and mild nausea that lasted about a minute. An assessment was performed immediately by a certified athletic trainer which revealed no tenderness to palpation within right upper quadrant although she did have a brief episode of abdominal pain. There was no abdominal distension, radiating pain or rebound tenderness. Vital signs were normal. The athlete attempted to eat after the competition and developed abdominal muscle spasm and discomfort. The athletic trainer monitored the athlete during the return to campus. Upon returning to campus, the athlete began vomiting and was referred by the certified athletic trainer to the emergency room. The athlete was having severe pain and pain radiating to her left shoulder upon arrival at the emergency room. She was evaluated by an emergency room physician, who was unable to determine whether the athlete had a pancreatic contusion, laceration, or damage to the pancreatic duct. **Differential Diagnosis:** Splenic rupture, Gallbladder injury, Stomach injury, Solar Plexus injury

**Treatment:** Blood work and a CT scan were performed and the athlete was administered Phenergan and Morphine. The CT scan was inconclusive as there was too much fluid present in the abdomen. There was cause for concern over pancreatic duct damage that extended to the splenic vein, so exploratory surgery was performed. During exploratory surgery, trauma surgeons found contusions to the pancreas, small bowel, transverse and upper colon and placed drainage tubes in the abdomen of the athlete to release pressure and allow for monitoring of the fluids in the abdominal cavity. The pancreatic duct was intact. Later, a MRI and MRCP was performed which confirmed that the athlete had sustained a two centimeter laceration to the pancreas, involving the pancreatic duct. Based on the results of the MRI, the athlete underwent a seventy-five percent pancreatectomy and total splenectomy. An infection developed as a result of the surgical wound being left open post-operatively. The athlete was discharged eighteen days later, with a wound vacuum to treat the infection. During a follow-up physician examination, the athlete received an insulin injection to stimulate the pancreatic release of its own insulin, to which her body responded. She was restricted from consuming glucose beverages, and alcohol in her diet. Her activity level was severely limited, requiring assistance to complete activities of daily living and her physician instructed the athlete not to lift anything over twenty pounds for about two months post-surgery. **Uniqueness:** Pancreatic injuries make up 1-4% of severe abdominal injuries. Blunt trauma, in particular, accounts for 0.2% of all pancreatic injuries. The amount of force required to drive the pancreas into the vertebral column was substantial due to its location deep in the abdominal cavity. **Conclusion:** At the present time, the athlete has resumed full activity in intercollegiate soccer. She has been advised by her physician to refrain from consuming soft drinks and alcohol. **Word Count:** 510