The objective of this case study is to present the signs and symptoms of Rhabdomyolysis in a collegiate athlete. Rhabdomyolysis is the breakdown of muscle fibers resulting in the release of muscle fiber contents into the circulatory system. Common signs and symptoms are fever, weakness, shortness of breath, and darkened urine. The subject in this case study was a 19-year-old, African-American, male, running back. The athlete denied a health history involving asthma, sickle cell disease, and Idiopathic Rhabdomyolysis. The athlete also denied a history of cardiac, pulmonary, gastrointestinal, neurological, and endocrine problems. Additionally, he denied previous use of tobacco products. He was hospitalized for head trauma resulting from an automobile accident two years prior. The athlete first presented with labored breathing during a football game. Additionally, he appeared lethargic, was perspiring excessively, and complained of excessive salivation and angina. During the subsequent week, the athlete continued to experience dyspnea with activity. An asthma specialist diagnosed him with asthma and prescribed two medicated inhalers. Twelve days later, the athlete experienced dyspnea during practice accompanied by chest heaviness and muscle cramping. His inhaler failed to relieve the symptoms, which progressively exacerbated. He was transported to a local emergency room where he continued to complain of chest restriction, while respirations returned to normal. Physical examination demonstrated normal vital signs and lung sounds. Neurological function was intact and unremarkable. A complete blood count test showed low levels of hemoglobin, hematocrit, and mean platelet volume. Urinalysis revealed a dark brown appearance with hematuria and increased protein. A complete metabolic panel revealed increased levels of Nitrogen, Creatinine, Transaminase Aspartate, and Creatine Kinase. Muscle biopsy ruled out myopathy and the athlete was tested to confirm the absence of Sickle Cell Disease. These combined results lead to a diagnosis of Rhabdomyolysis. The athlete returned to football the next fall season and continues to use the inhaler as needed. When his labored breathing cannot be controlled, he is taken to the hospital to evaluate Creatinine levels. If elevated, he is administered intravenous fluid. Approximately 26,000 cases of Rhabdomyolysis are reported annually in the United States. The effects of this disease range from cardiac arrhythmia and muscle atrophy to complete renal failure. Fifteen percent of patients with this syndrome are not diagnosed until they are in the early stages of complete renal failure. Early recognition and treatment is necessary to prevent serious complication or death.

Key Words: Creatinine, Dyspnea, Myopathy, Rhabdomyolysis, Urinalysis