EXERCISE INDUCED PARADOXICAL VOCAL COR DYSFUNCTION IN AN INTERCOLLEGIATE FOOTBALL PLAYER
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**Background:** Paradoxical vocal cord dysfunction (PVCD) is a complicated disorder causing airway obstruction and stridor in the physically active during acute attacks. Under physical or emotional stress, laryngeal spasm can cause the vocal cords to adduct considerably, narrowing or even closing the glottis, thereby creating exertional dyspnea. This case study focuses on a 20 year-old male football player with vocal cord dysfunction, gastroesophageal reflux disease, and a deviated septum. Most PVCD cases are classically misdiagnosed as exercise-induced asthma as uncovered with this particular athlete at the age of 14 who was prescribed a long and short acting beta agonist. During his adolescent years, these medications proved to be ineffective and symptoms exacerbated. At the age of 17, the athlete reported frequent episodes of dyspnea and an incident of syncope during a high school football game. The athlete’s medication increased to include steroid treatments of Flovent, Pulmicort, and Advair with no reported change in exertional symptomology. Shortly thereafter, the athlete was diagnosed with PVCD. The athlete did not participate in competitive sports during this freshman year. During pre-season football camp his sophomore year, he suffered a heat-related illness and received prednisone (120mg intravenously) along with a nebulizer treatment. The athlete described and continued to experience symptoms of exertional dyspnea, especially during activities of daily living. He was referred to pulmonary specialist for evaluation along with a neurologist to rule out metabolic disease. His previous medical and family history was carefully reviewed and subjected to controlled pulmonary function tests. **Differential Diagnosis:** acute respiratory distress, anaphylactic laryngeal edema, bilateral vocal cord paralysis, exercise-induced asthma, extrinsic airway compression, foreign body aspiration, infectious croup, laryngomalacia, myasthenia gravis, neoplasms, spastic dysphonia and other neuropathies, subglottic stenosis, traumatic edema or hemorrhage. **Treatment:** The athlete underwent sessions with a speech-language pathologist and a deviated septum was corrected during summer before senior intercollegiate year. In effort to continue playing football, the patient received gas inhalation therapy during the half-time of every game his senior year. The pulmonary specialist utilized a Wingate Stress test that showed a decrease in peak flow, poor tidal volume, lactic acidulous, and an increase in heart rate with no change in oxygen levels. Patient was referred to a neurologist to rule out metabolic disease and is still undergoing testing. **Uniqueness:** Patient did not respond to traditional treatment for exercise induced asthma. Speech-language pathologist proved beneficial in controlling breathing during physical activity. Further evaluations are being considered to rule out alternate metabolic disorders. **Conclusions:** Physically active individuals who do not respond to traditional treatment approaches for exercise-related asthma should be evaluated for other related pathologies. The certified athletic trainer may be best situated to identify the symptomology associated with such exertional dysfunction. In most on-field acute cases, management to reduce the respiratory distress would include the initiation of diaphragmatic exercise. Under medical supervision, a withdrawal from previously prescribed asthma medications should be considered. Most physically active individuals can minimize or eliminate such symptoms with conservative speech-language therapy and corrective breathing awareness. **Word Count:** 495