Squamous Cell Oropharyngeal Carcinoma Masquerading as Cardiac Symptoms

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Introduction

Head and neck squamous cell carcinoma (HNSCC) is comprised of the oral cavity, pharynx, and larynx; lesser common cavities can include the paranasal sinuses, nasal cavity, and salivary glands. Symptoms manifesting as HNSCC can often be vague, masking as common cold signs with a sore throat, difficulty swallowing, and/or hoarseness in voice. Rarely, does it present with cardiac symptoms. Here we describe a case of a patient who initially came into the emergency department for syncope and was found to have oropharyngeal carcinoma.

Case Description

A 64 year old male with past medical history of 30-pack year tobacco use, hypertension, and BPH presented to the ED via EMS after he suffered a syncopal episode at home and was found to be bradycardic on arrival with rates as low as the 20s. Notably, he had a 15lb weight loss over the last 10 months, as well as, lightheadedness upon standing a few months prior to presentation. He denied any chest pain, shortness of breath, difficulty swallowing, or sore throat. Patient had no medical history of coronary artery disease, valvular disease, congestive heart failure, or arrythmias. EKG showed sinus bradycardia. Physical examination revealed a large palpable left sided neck mass. CT soft tissue neck showed a left base of tongue mass and left neck mass with extracapsular extension and obliteration of the left IJ with tumor extending around the left carotid artery without occlusion or compression of the ICA. Patient underwent biopsy of the left neck mass and lymph node which revealed P16 positive basaloid squamous cell carcinoma. Head and neck surgical oncology as well as medical oncology were consulted for treatment initiation. Patient was not deemed a surgical candidate due to carotid artery involvement and chemoradiation was preferred recommendation. However, due to persistent bradycardia and hypotension during his hospitalization, both cardiology and electrophysiology were consulted for evaluation. Patient eventually underwent pacemaker implantation to maintain his bradycardia until his tumor was treated with chemoradiation. He was discharged home with outpatient follow up with medical oncology and radiation oncology for further staging work-up and induction of treatment.

Conclusion

Head and neck cancer accounts for an estimated 4% of all cancers in the United States. Most notably, it is more common in men than women and often involves tobacco use as a prominent risk factor. This case illustrates a typical patient with common risk factors that had a complex presentation of symptoms resulting in a pacemaker implantation. Although it is rare for syncope to be a result of a neck mass, it is crucial to recognize other causes outside of cardiac etiology. Carotid sinus hypersensitivity is a phenomenon where stimulation of baroreceptors, whether external or internal, results in a sudden decrease in heart rate and blood pressure. Patients, such as the one discussed here, can present with a neck mass in the carotid sinus region with syncopal or near syncopal symptoms and although it may appear cardiac in nature, the underlying cause could simply be a tumor causing mass effect. This case implores physicians to take into consideration the value of a complete history and physical on initial evaluations.

Figures

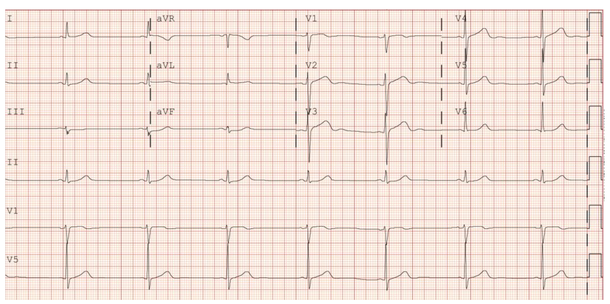

Figure 1. EKG revealing sinus bradycardia w/ minimal anterior lead ST elevations

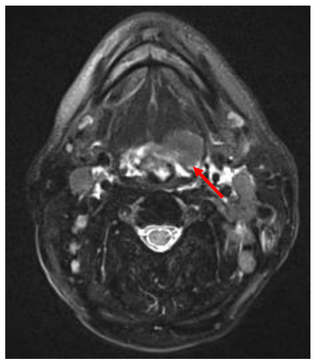

Figure 2. CT soft tissue neck showing left base of tongue mass

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