中文題目:反覆暈厥發生在一個下咽癌患者

英文題目: Recurrent syncope in a patient with advanced hypopharyngeal cancer

作 者:張峻嘉<sup>1,3</sup>,林映藍<sup>6</sup> 陳瑩惠<sup>3,5</sup>,林晏年,<sup>2,3,4</sup>,

服務單位: <sup>1</sup>中國醫藥大學中醫學系甲組 <sup>2</sup>中國醫藥大學臨醫所 <sup>3</sup>中國附醫內科部 <sup>4</sup>中國附醫 心臟血管系 <sup>5</sup>中國附醫內科部新陳代謝科 <sup>6</sup>中國附醫神經部

Case Presentation: A 58-year-old male heavy smoker, drinker, with histories of alcoholic hepatitis, gastric ulcer, presented to our emergency department with recurrent fainting and profuse sweating for about 30 minutes followed with loss of consciousness for 10 minutes. These symptoms were primarily related to neck movements but also occurred spontaneously. He also reported severe left neck sharp pain with radiation ot left posterior head. Physical examination was remarkable for regular slow heart sound, post-crycoid edema, and a mass about 2x2 cm in left posterior neck. ECG revealed junctional bradycardia, which resolved after intravenous push atropine 1mg and temporary dopamine infusion. Brain CT showed none remarkable, while head and neck CT disclosed a necrotic mass in left postcricoid hypopharynx with extension to upper esophagus and carotid artery. There were also necrotic lymph nodes in left upper neck. Carotid artery ultrasonography showed no vascular thombosis or dissection. Rigid laryngoscopic biposy of posterior wall of hypopharynx identified poorly-differentiated carcinoma. A diagnosis of left hypopharyngeal cancer with left neck metastastic lymph node (T4bN3Mx, stage IV) was made. For inresectable stage, he was going to receive chemotherapy and radiotherapy. However, the cancer therapy was postponed for he developed recurrent syncope accompanied profund bradycardia and hypotension (HR 35-45, SBP/DBP: 90/60 while attack). Echocardiography showed none remarkable. Coronary angiogram showed coronary stenosis. Electrophysiology test showed supressed and variable SA nodal and AV nodal function. Carotid sinus syndrome due to carotid buld involvement by hypopharyngeal cancer was impressed. He therefore received implanatation of single-chamber ventricular permernent percutaneous pacemaker for back up pacing. Also, we prescribed Bambuteral 10mg and Methylprednisolone 4mg once daily to minimize parasympathetic effect. After pacemaker implantation and drug adjustment, there were still some minor episodes. However, he tolerated well and had no more syncope. Consequently, he was refered to ENT and oncologist for further cancer treatment.

**Discussion:** In the setting of head and neck cancer, syncope usually arises because of carotid-sinus hypersensitivity (secondary to mechanical compression of the carotid sinus) and glossopharyngeal neuralgia (from tumour-induced irritation of the glossopharyngeal nerve that carry baroreceptor information from carotid sinus to the brain stem). Carotid sinus syndrome (CSS) can be divided into three sub-types based on the blood pressure and heart rate response to carotid sinus massage of 5-10s. Cardio-inhibitory carotid sinus hypersensitivity is diagnosed by  $\geq 3$  to 5-second pause; vasodepressor type based on a reduction in systolic blood pressure by at least 50 mm Hg, and a mixed sub-type carotid sinus hypersensitivity manifested by a combination of the two. CSS is

associated with aging and atherosclerosis. Acute unilateral head or neck pain usually precedes the syncopal episode. Treatment consists of relieving the compression by either surgical resection or shrinking the tumor with chemotherapy or radiation. From data available, chemoradiotherapy may be a better choice for controlling syncope because of the absence of recurrence. However, before anticancer treatment for head and neck cancer, adrenaline and atropine may be indicated to prevent the repeat attack of syncope. Glucocorticoid was also used to control syncope due to intravascular volume expansion through sodium reabsorption in some cases. Pacemaker therapy might alleviate syncope resulting from a cardioinhibitory reflex with bradycardia. However, pacing might become ineffective if pure vasodepressor syncope (with hypotension as the main feature) develops. The selection of pacing mode is also crucial in the management of patients with cardioinhibitory CSS. There is no role of single-chamber atrial pacing as these patients have higher rates of atrioventricular block. Dual chamber pacing is preferred over single chamber ventricular pacing.