

## Case Conference

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### Case Report

#### Recurrent Syncope in a Cancer Patient: A Case Report and Review of the Literature

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- 59 y/o male, Recurrent syncope over a period of four weeks
- Invasive squamous cell carcinoma of the left pre-auricular region s/p radiation therapy and chemotherapy
- CT: progression of his tumor, completely encasing his internal carotid artery at its bifurcation from the left common carotid artery.

## ECG

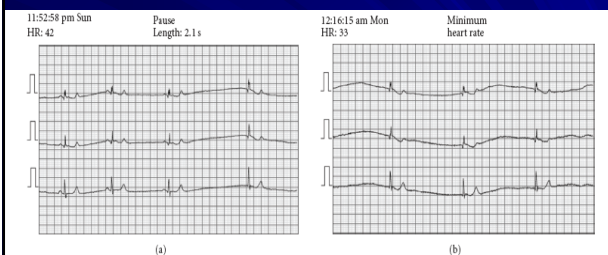
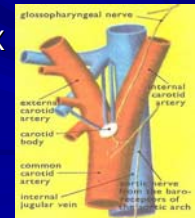


FIGURE 1: (a) Holter monitor recording showing sinus bradycardia at 42 bpm with sinus pauses of up to 2.1 seconds, corresponding to his prodromal symptoms while awake. (b) Holter monitor recording during a syncopal episode showing a drop in heart rate to 33 bpm.

## Reflex Syncope

- Mechanical encroachment on the carotid baroreceptor and glossopharyngeal nerve
- Direct tumor ingrowth at CN IX at the jugular foramen.
- Cross-talk between CN IX & X



## Treatment of Syncope in Cancer Patient

- Mechanism: direct tumor compression of the carotid sinus baroreceptors or CN IX
- No guidelines currently in place to direct the treatment for syncope in this specific patient population.
- Definitive treatment and successful syncope relief depends primarily on regression of the underlying tumor

## Recurrent Syncope as Initial Presenting Symptom of Non-Small Cell Lung Cancer — A Case Report

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- 70 y/o male, Multiple episodes of syncope for 2 months
- 50 pack-year smoking, Chronic cough with scanty sputum for more 10 years, and aggravating dry cough recently
- CT: masses in the left lower neck and mediastinum, encasing left common carotid artery at the level of branching from the aorta
- Pathology: non-small cell lung cancer with multiple metastases

## Neurocardiogenic Syncope

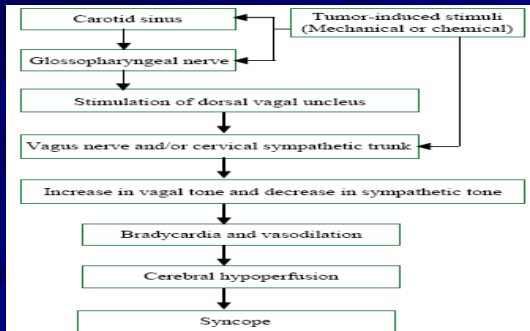


Fig. 3. Neurocardiogenic syncope in malignancy.

## Conclusion

- Atypical medical history in an elderly patient with newly developed neurocardiogenic syncope should alert physicians to the possibility of malignancy.
- The patient should not only be examined for head and neck malignancies but also for possible causes of neck metastasis.