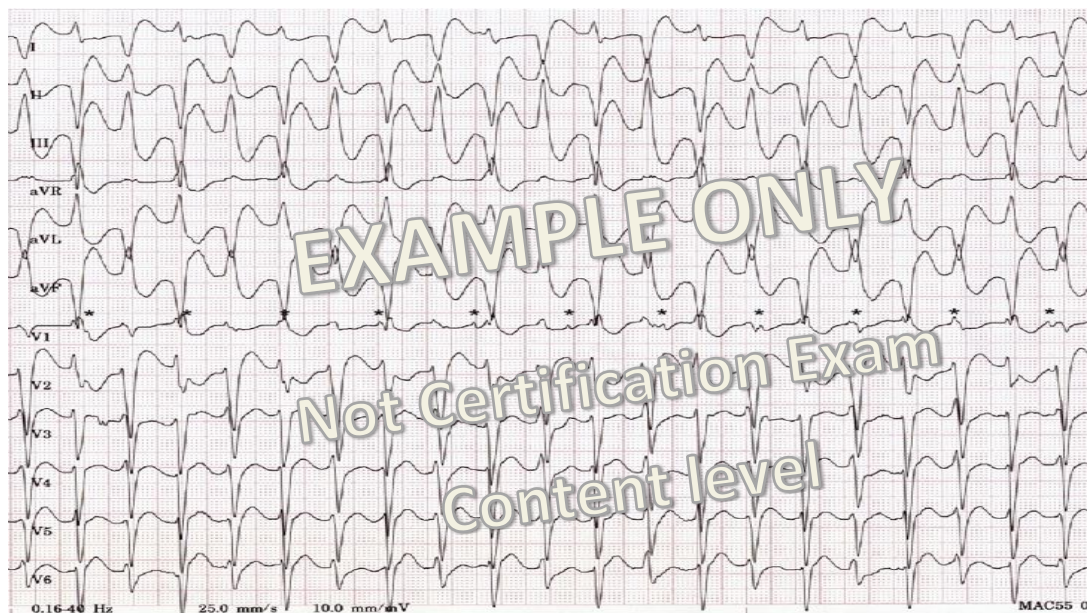


As of September 2016 the CSCT National Certification Examination will include 10 – 15% Critical Thinking Multiple Select Case based questions. These Case Study based questions will focus on the evaluation of clinical skills. The following is an example of the question format ONLY.

All questions are worth 1 mark unless stated otherwise.

Case Study: 65-year-old male arrived by ambulance following an episode of frank syncope. The following ECG was taken in the emergency department.

Patient history: coronary artery disease (CAD), asthma, borderline diabetic. His medications include: digoxin, ramipril, crestor and recently started on lasix or furosemide.



1. This question is worth **2 marks**. What is the best interpretation of the above arrhythmia? (Choose all that apply)

- A. bidirectional ventricular tachycardia (+0.75)
- B. torasades de Pointe (-0.5)
- C. ventricular bigeminy (+0.5)
- D. electrical alternans (+0.25)
- E. parasystole (+0.5)
- F. sinus rhythm (-0.5)
- G. 2nd degree Mobitz 2 AVB (-0.75)
- H. ventricular pacing (-0.25)

Ans. A,D, and E

2. Which of the following is **NOT** a potential cause of the above arrhythmia?

- A. severe digoxin toxicity
- B. end stage heart failure
- C. pre-excitation syndrome
- D. herbal aconite poisoning

Ans. C

3. Which the following is **NOT** a cause of frank syncope?

- A. hypoglycemia
- B. hyperglycemia
- C. orthostatic hypotension
- D. carotid sinus syndrome

Ans. B

Upon further examination this patient was found to be in NYHA Class 3 heart failure with no structural heart disease. He was recently started on a diuretic.

4. What is the most common side effects of diuretics?

- A. low level of magnesium
- B. low level of potassium
- C. hypertension
- D. hypotension

Ans. B

5. All the following may be a possible treatment for this patient **EXCEPT:**

- A. a beta-blocker
- B. implantable cardiac defibrillator
- C. lifestyle counseling
- D. genetic counseling

Ans. D