

**Northwest Community EMS System**  
**March 2021 CE Credit Questions: Basic Arrhythmias and ACS**

Name:	Date submitted:
EMS Agency/hospital:	Credit awarded (date):
EMSC/Educator reviewer:	Returned for revisions:
	Revisions received:

This packet earns you the equivalent of the 2 hours of live or Zoom CE class.  
 Sources: March 2021 CE taped zoom class; SOPs; CE PPT for Credit Qu posted to website;

1. When a patient is complaining about pain, what angina equivalents should cause EMS to suspect possible ACS?


2. Which of the following patients with chest discomfort should receive ASA?
- A. 72/F pale & clammy, following a syncopal episode in church; sinus bradycardia on monitor
  - B. 61/M driver involved in a high speed frontal impact, in which you note a bent steering wheel
  - C. 69/F who took 4 chewable baby aspirin 1 hour ago when she started feeling poorly
  - D. 22/F w/ pounding in her chest following an argument with her boyfriend

3. List 3 ECG findings that are indicative of ischemia:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

4. To which of the following patients would it be acceptable to administer NTG sublingually?

- A. 52/M who took Viagra 4 hrs ago
- B. 68/M STE in Leads II, III and aVF, no STE in V4R, BP 124/78, HR 68
- C. 65/F with VS: BP 86/60, HR 88, RR 22, SpO2 92%, ETCO2 32, square
- D. 55/M with VS: BP 134/90, HR 110, RR 16, SpO2 95%,ETCO2 37, square

5. You respond for a 68 y/o female patient on the patio of her deck, eyes closed, leaning her head back with weakness and lightheadedness. She was gardening and began to feel like she was going to faint. She did not fall or lose consciousness. The patient is pale, cool and moist. She is awake and answers your questions appropriately, but keeps her eyes closed when not asked to open them. Her breathing is unlabored. She denies chest pain, SOB, or nausea. She denies allergies. Meds: ASA 81 mg, losartan. PMH: HTN. Her radial pulse is very weak and very slow. Lungs are clear. Your partner gets VS while you attach the monitor.



What is this patient's rhythm?

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6. Acute STE changes in leads II, III, and aVF. VS: BP 88/60, HR 40, RR 18, SpO2 on RA 95%, ETCO2 is 32. Check all of the interventions that are indicated for this patient now. IV access has been completed.

- ☐ Valsalva maneuver
- ☐ Apply pacing pads
- ☐ Repeat 12L w/ V4R
- ☐ Administer 324 mg ASA
- ☐ Administer NTG 0.4 mg SL
- ☐ Administer Atropine 0.5 mg rapid IV
- ☐ Begin external cardiac pacing at 60 BPM

7. Because this patient is hypotensive, which should be corrected first? Circle one.

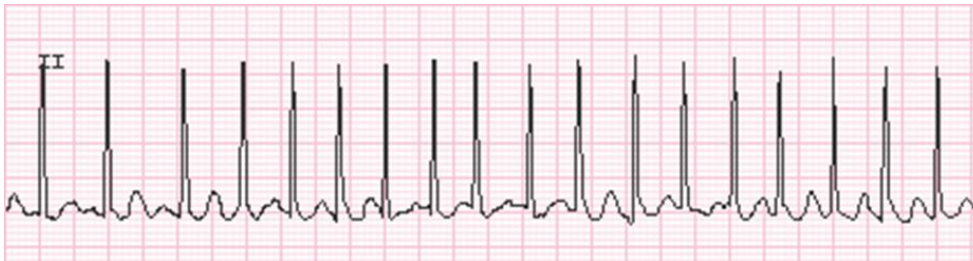
Blood pressure

Heart rate

8. After the interventions selected above, the patient becomes unresponsive, skin is cool and clammy, and her rhythm and rate do not change. Which of the following is indicated first?

- A. Transcutaneous pacing
- B. Synchronized cardioversion
- C. Norepinephrine drip 2 mL/min
- D. Repeat IV Atropine to a total of 3 mg

9. You are dispatched for a 48 y/o man with pounding in his chest and chest heaviness. You find him lying on his bed. His wife says they just returned from a walk when he suddenly said he didn't feel good and needed to lie down. The patient is alert and answers questions appropriately. He speaks in full sentences and his breathing appears unlabored. His skin is diaphoretic but warm. You attempt to count his radial pulse but it is too fast. Lungs are clear. Your coworker puts the pt on the monitor: What is your interpretation of his rhythm?



What is your rhythm interpretation for this patient? \_\_\_\_\_

VS: BP 100/66, HR 166, RR 18, SpO2 96%, ETCO2 34. He rates his discomfort as 6/10. His wife states the pt has no PMH, no allergies, is a non-smoker, and takes no meds except Viagra and some new diet pill.

10. What intervention is indicated first, to slow his rhythm per SOP? Describe the procedure (found in procedure manual).


11. The patient does not improve, the pt becomes slow to respond. How will you treat this patient?

\_\_\_\_\_

12. The pt's rhythm changes to

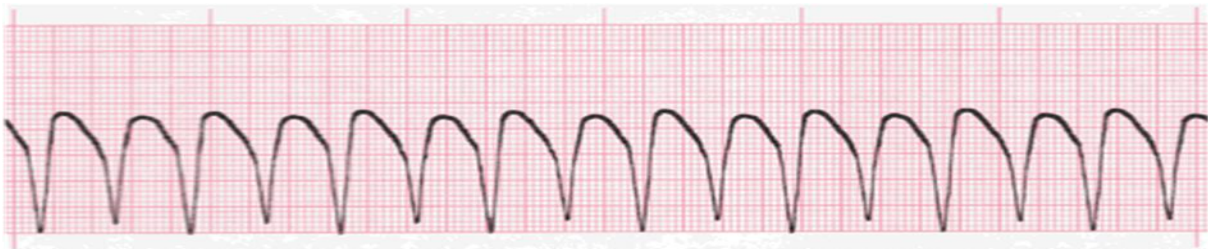


He becomes more alert and says he feels much better – the chest heaviness is gone and his heart is no longer pounding. He denies difficulty breathing, lightheadedness, nausea, dizziness. VS: BP 136/80, HR 76, RR 16, SpO2 97%, ETCO2 37.

What should be done before transport?

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13. EMS responds for a 55 y/o patient with chest pain. You arrive at the pt's residence and find the pt sitting at the kitchen table. He is grimacing, and leaning forward w/ his hand on his chest. He says he has terrible chest pain and can't catch his breath. His wife says he walked into the house from the garage where he was sanding boards for a project, and he was gasping and leaning against the wall as he came into the house. As you approach him he says he might pass out. You move him to the floor, supine, and notice that he is very diaphoretic and pale. You touch his wrist to check a radial pulse and note that it is very fast and weak. He is placed on the monitor and you see this in Lead II:



14. What is your rhythm interpretation? \_\_\_\_\_

History is as follows: Allergies: none. Meds: Norvasc, Flomax. PMH: HTN, palpitations, BPH. Last oral intake: 3 hrs ago. Events: standing in the garage using electric sander. O: Rapid onset; P: sitting down (better); Q: squeezing, constant; R: stays in mid chest, no radiation, has never happened before; S: 10/10. T: 10 min ago.

What intervention would you attempt, considering that this pt is still awake and talking to you?

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15. What preparations should you make in case the patient deteriorates during or after the above intervention?

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16. The patient becomes unresponsive. He is cardioverted into the following rhythm. He has a pulse and opens his eyes. VS are now stable and the patient no longer has symptoms.



What procedure must be done prior to beginning transport of this patient?

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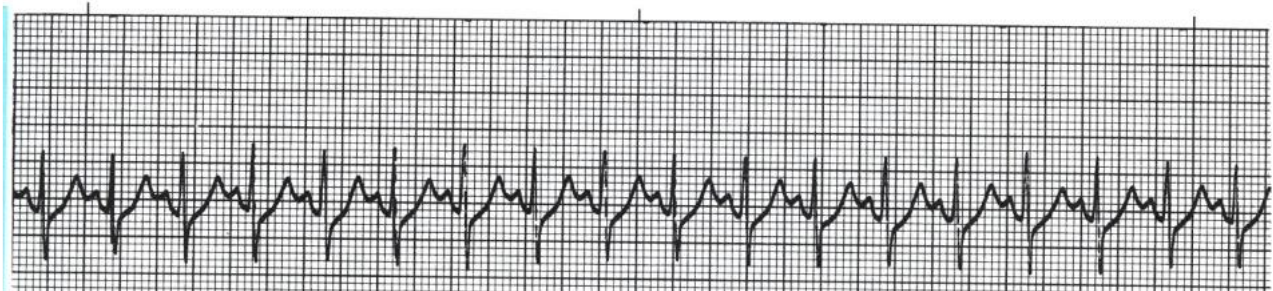


**CC: Mild weakness**

**Vitals: 130/70; HR per ECG; Awake and oriented**

17. What is your interpretation? \_\_\_\_\_

18. What treatment should be done? \_\_\_\_\_



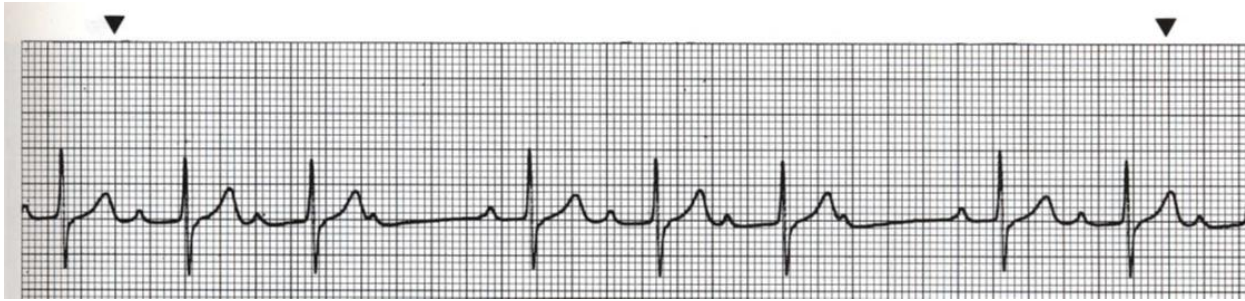
**CC: CP and difficulty breathing**

**Vitals: 84/68; HR per ECG; awake but disoriented, + gag reflex, bilateral wheezes**

19. What is your interpretation? \_\_\_\_\_

20. What treatment should be done? \_\_\_\_\_



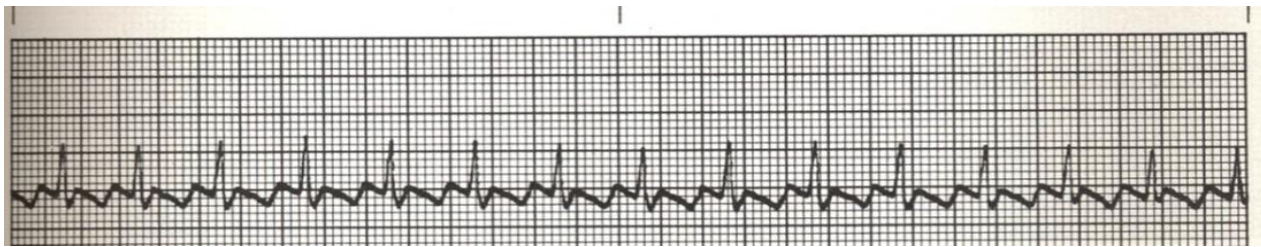


**CC:** Lightheaded/near syncope

**Vitals:** 88/56; HR per ECG; in and out of consciousness

21. What is your interpretation? \_\_\_\_\_

22. What treatment should be done? \_\_\_\_\_

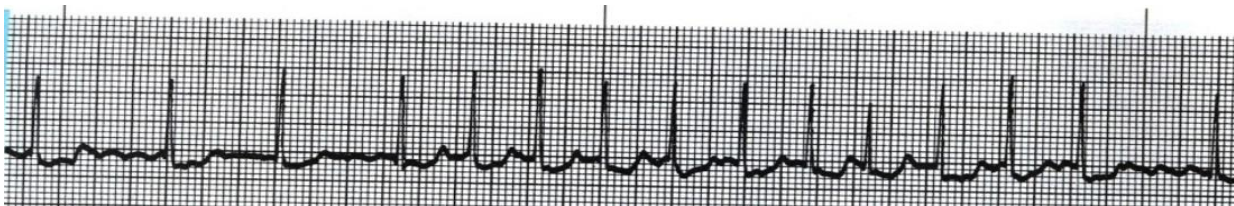


**CC:** Ongoing chest pain

**Vitals:** 84/56; HR per ECG; rapidly declining mental status

23. What is your interpretation? \_\_\_\_\_

24. What treatment should be done? \_\_\_\_\_



**CC:** near syncopal episode, persistent weakness

**Vitals:** 118/70, HR per ECG, awake and oriented

25. What is your interpretation? \_\_\_\_\_

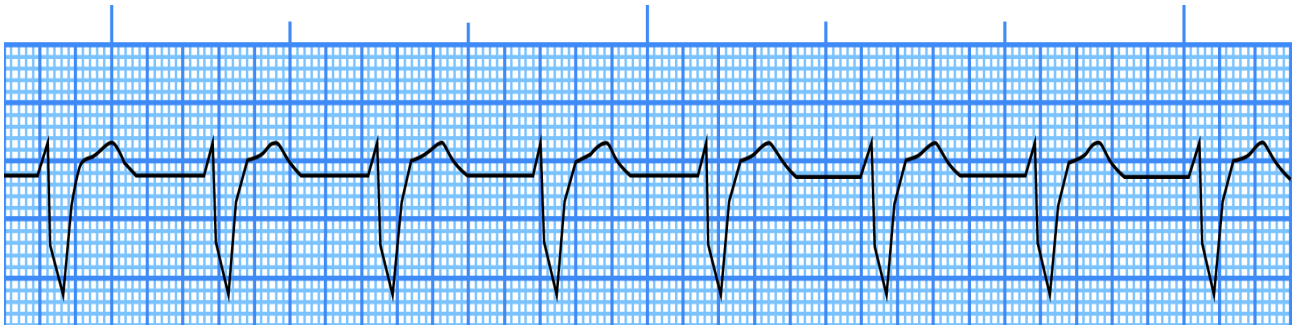
26. What treatment should be done? \_\_\_\_\_



**CC:** Syncopal episode; vitals: 80/60; HR per ECG; disoriented

27. What is your interpretation? \_\_\_\_\_

28. What is your treatment? \_\_\_\_\_



**CC:** Unresponsive

**Vitals:** 78/54; HR per ECG, bilateral crackles

29. What is your interpretation? \_\_\_\_\_

30. What is your treatment? \_\_\_\_\_



**CC:** General weakness

**Vitals:** 108/64; HR per ECG; awake and oriented

31. What is your interpretation? \_\_\_\_\_

32. What is your treatment? \_\_\_\_\_



**CC:** lightheaded and dizzy

**Vitals:** 112/64; HR per ECG; awake and oriented

33. What is your interpretation? \_\_\_\_\_

34. What is your treatment? \_\_\_\_\_





**CC:** awake with CP

**Vitals:** BP 92/50; pulse is too fast to count; pt appears uncomfortable and diaphoretic

35. What is your interpretation? \_\_\_\_\_

36. What is your treatment? \_\_\_\_\_



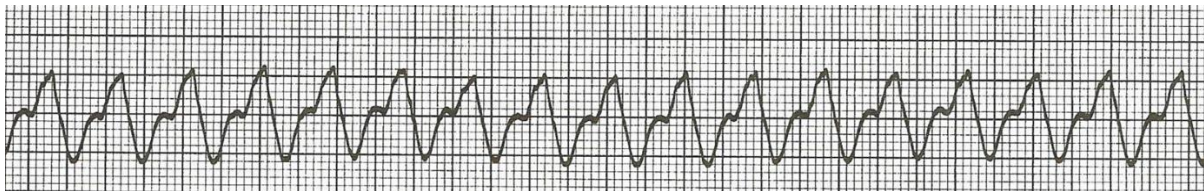
55 y/o M, hx of DM, HTN and ↑ cholesterol, 190 lbs

**CC:** CP 9/10, no SOB

**Vitals:** 156/90, HR per ECG, lungs clear, SpO2 92%  
12 lead shows inferior wall MI

37. What is your interpretation? \_\_\_\_\_

38. What is your treatment? \_\_\_\_\_



**CC:** Patient feeling weak

**Vitals:** 124/56; HR per ECG; oriented but slow to respond

39. What is your interpretation? \_\_\_\_\_

40. What is your treatment? \_\_\_\_\_