Skills Review

1. You are screening a potential research subject. The patient's resting blood pressure is 150/95 and EKG is: **NSR**

Do you start a maximal cycle exercise test? ACSM guidelines for BP?

At about 100 watts you begin to see this: **PVC2**
Do you continue to test?

At 150 watts you see this. **CPLT**
Do you continue the test?

At 175 watts you see this. **Special function 30 = triplet**
Do you continue the test?

During recovery you see this. **Special function 29 = multi-focal PVC**

What does this tell you about ventricular function?

2. You are working in a cardiac clinic when a patient comes up to you and says she are having trouble breathing and suddenly just doesn't feel right. You connect an EKG and see this. **A-FLTR**

What is this?
Should you report this to a doctor?
Why is noting the time important?
What types of treatments would be considered to put this patient into normal rhythm?

3. You are standing in line for a movie when an elderly man in front of you suddenly collapses to the floor. What do you do first?

He has no pulse. The ticket taker comes up with an AED. You attach the electrodes, turn it on, and it does not shock. EMTs now arrive—attach electrodes—flat line. **ASYST**
What alogorhthm should come to mind? TEA

It is too late to attach a pacer, so what drugs will be used next?

In trying to determine what caused this sudden cardiac event (other than a sudden heart attack), what letters may help you determine the problem?

4. You work in a stress testing lab in the hospital and you are performing a stress test on a patient who complains of chest pain. In the middle of the test, he suddenly

complains of very strong chest pain (4 out of 5) and you see the following EKG: **spec fn 12: ST depression.**

What letters should go through you mind?
The patient asks for his medication. What is this likely to be?
What else might help ease this patients pain?

5. You are performing a stress test on a classmate as a project assignment for one of the exercise physiology classes. Resting EKG was normal. You are in the middle of the protocol, when suddenly the following EKG is seen: **BRAD**

What do you see? Is this a normal exercise response?
What letters should go through you mind?
The subject becomes pre-syncopal and you lie him down. Do you call for help?
What drug is most likely to be effective and called for first? What other drugs?

6. The following EKG is seen during rest in a client just before a scheduled exercise fitness test: **2AVB2.**

What do you see? Should you continue and do this test? Is this an ACSM absolute or relative contra-indication for testing?

What about this one: **3AVB**?

7. You are in the middle of an exercise stress test when the following rhythm appears: **spec fn 30: ST elevation.**

What do you see? Is this a contra-indication to continue testing? ACSM absolute or relative contra-indication?

8. During recovery from a maximal exertion stress test, an apparently healthy athlete complains of chest pain and suddenly faints. You see the following EKG: **V-TAC.**

What do you see? What do you do next?
What rhythm are you likely to see next if nothing is done? **V-FIB**
About how many minutes do you have to convert this rhythm before recovery becomes unlikely?

9. A client has the following EKG as you prepare him to begin an exercise stress test**: spec fn 20: BBB.**

Do you perform the test? Which ACSM contra-indication applies?

10. You are camping in the woods and at the end of a hard day of hiking. One of your friends say they are not feeling well—they are light-headed and dizzy. You feel their pulse and it is racing. (Unbeknownst to you they have the following EKG: **TACH1**

What 3 Cs should run through your mind?
What simple maneuver might you try to slow their heart rate?