

Case Study Review for Exit Exam

The client is a 59 year old divorced black male police officer whose father died of an MI at age 67. Today is his only check-up since his first one 6 years ago when he joined the police force. He currently smokes and has done so for 37 years. His waist girth is 38 inches and he seldom does any type of exercise. He was diagnosed with Type I diabetes 6 years ago and has managed his blood glucose levels well most of the time. He was also diagnosed with high blood pressure 6 years ago and was prescribed Coreg and Lasix (a beta blocker and a diuretic respectively) to treat the problem. His blood pressure today is 160 / 112. Upon auscultation, the physician has heard slight rales in the lower two lung fields and a distinct systolic "click". His recent resting and exercise ECG's are on the following pages. He exercises to volitional fatigue at 3 min 0 sec into the 2nd stage of the Bruce protocol (He quit at the end of the 2nd stage). His most recent 12 hour fasting blood work shows the following (* = abnormally high):

TC:	249 mg / dL	*
HDL-C	41 mg / dL	
LDL-C	141 mg / dL	*
Triglycerides	166 mg / dL	*
GLUC	196 mg / dL	*
BUN	122 mg / dL	*
Creatinine	7.8 mg / dL	*

1. According to the American Heart Association and the American College of Sports Medicine, how many risk factors does the client have?
2. Should a physician be present for his maximal GXT?
3. What might be inferred by his resting glucose level ? His BUN and Creatinine levels?
4. What might be inferred by his resting blood pressure?
5. What might be inferred by the auscultation results?
6. Seen in the resting ECG is:
 - a. an atrial abnormality that, if not treated, may have serious consequences
 - b. abnormal progression of the R-wave across the precordial leads
 - c. a complete right bundle branch block
 - d. no sign of ischemia or infarction
 - e. a, b
 - f. b, c, d
 - f. all of the above.
7. After examining all resting, exercise, and recovery ECG's one might reasonably conclude that:
 - a. the client is prone to dangerous ventricular ectopic activity
 - b. the person should be referred to a physician for further evaluation
 - c. the resting & exercise rhythm is irregular with left axis deviation
 - d. there is evidence of an old anterior infarction denoted by q-waves in V1 and AVR
 - e. b, c, d,
 - f. a, b, c
 - g. all of the above
8. Looking at the clients health history and GXT results.....
 - a. the client meets criteria for syndrome X
 - b. no indications were seen that his test should perhaps have been terminated early
 - c. his VO₂ max was approximately 10 METs (\pm 1 ml / kg/ min)
 - d. his HDL-C level is high enough to be a negative risk factor
 - e. a, b, c
 - f. b, c, d
 - g. all of the above

12 Lead

ST Level +5.7

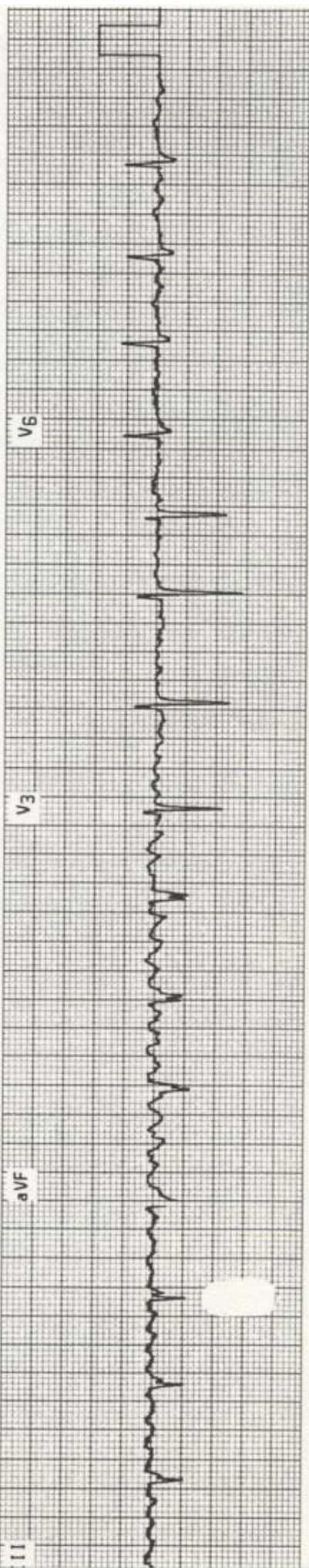
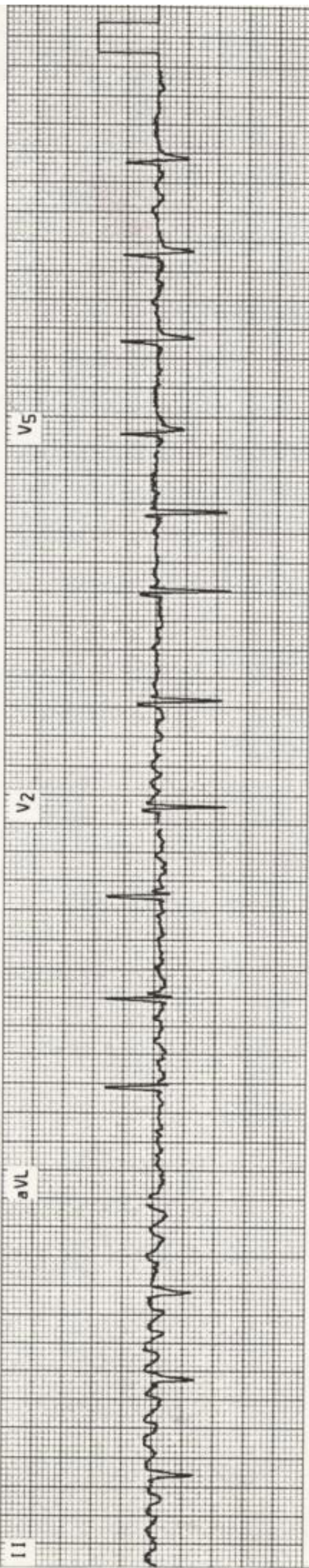
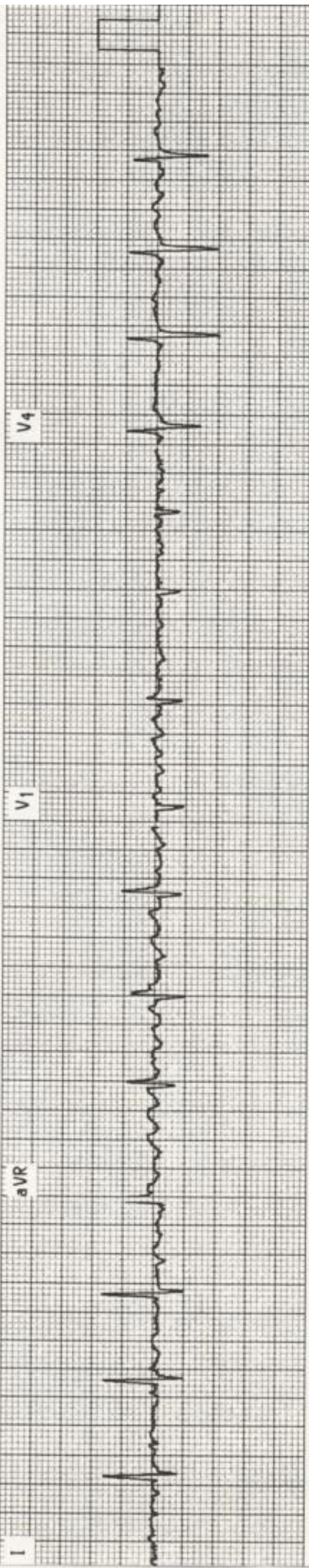
Gain x1

Resting

ST Slope +2 HR 105

25 mm/sec

BP = 160/112



12 Lead

ST Level +0.7

Gain x1

Stage 1

HR 154

25 mm/sec

BP = 172/115

Write Screen

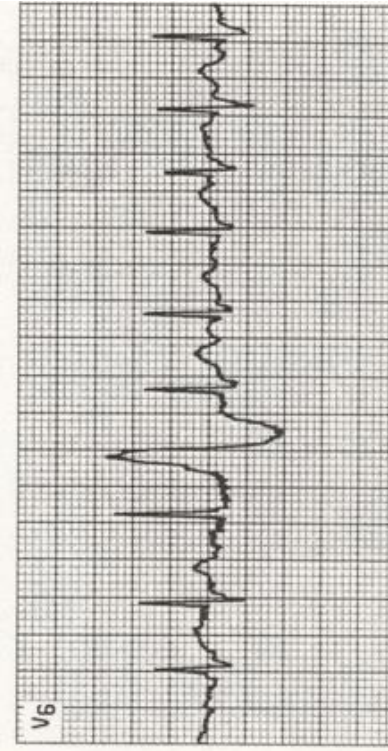
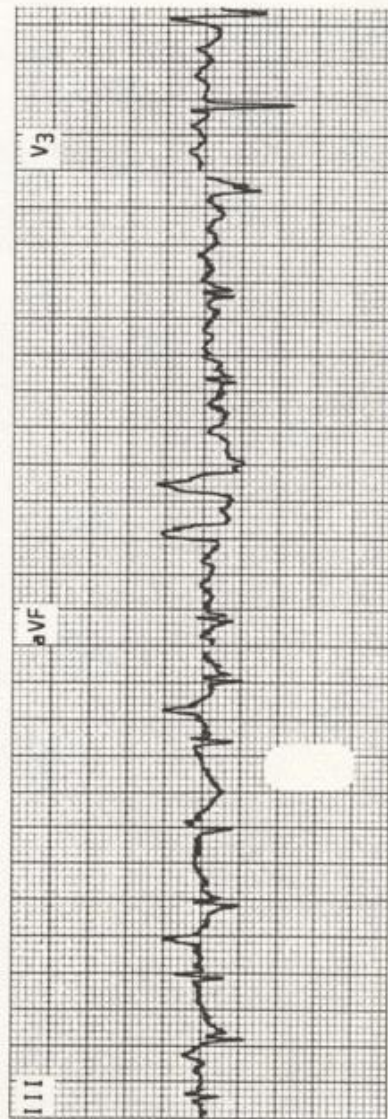
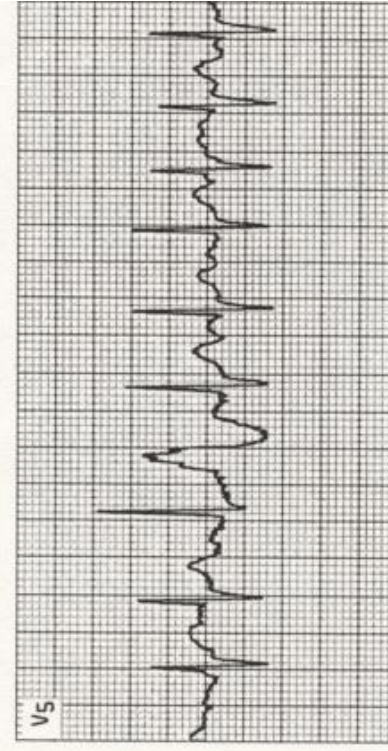
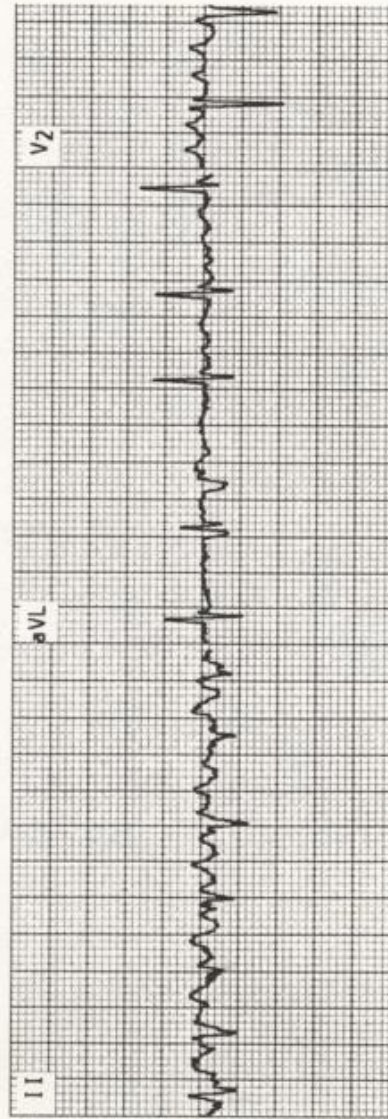
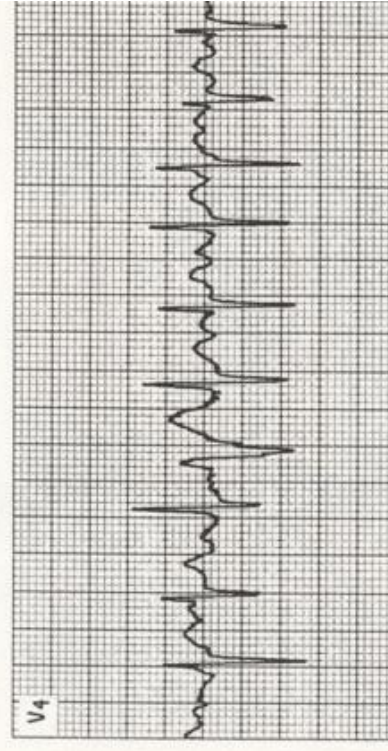
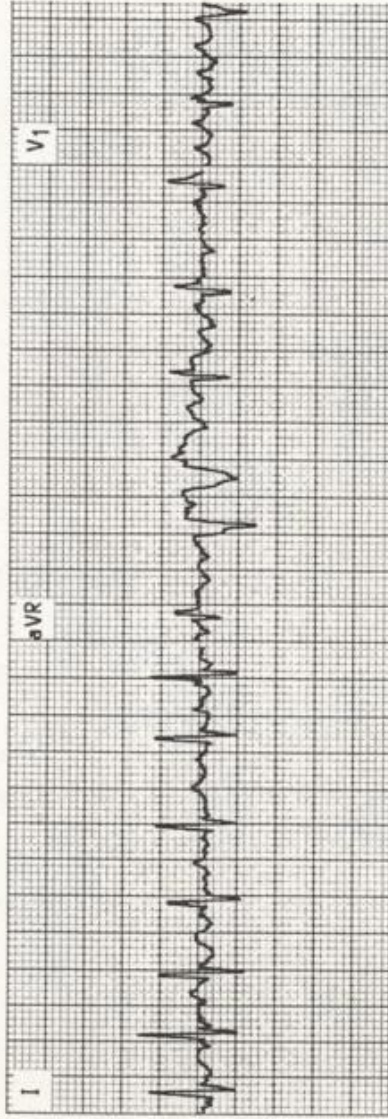
ST Level +0.7

Gain x1

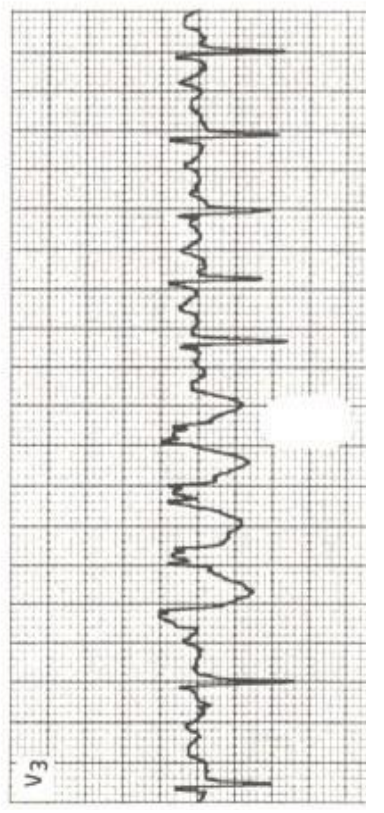
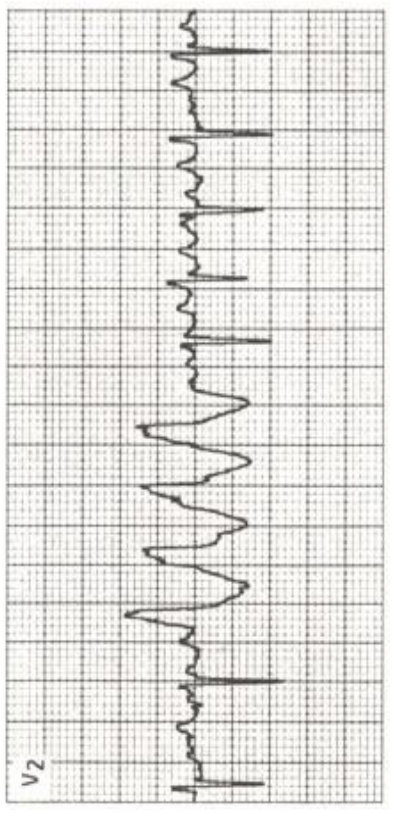
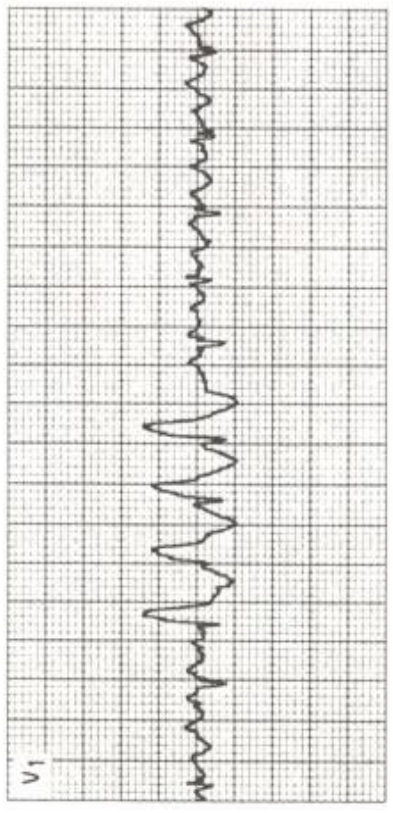
Stage 1

HR 154

25 mm/sec



Write Screen ST Level +1.0 Gain x1
Stage 2 0:34 ST Slope +18 HR 163 25 mm/sec



BLOOD PRESSURE = 180/130

12 Lead

ST Level +1.1

Gain x1

BP = 140/120

Recovery

4:00 ST Slope +18 HR 115

25 mm/sec

