

CHAPTER 7

Cardiovascular Problems

1. You are working in the emergency department (ED) when a client arrives reporting substernal and left arm discomfort that has been going on for about 3 hours. Which laboratory test will be most useful in determining whether you should anticipate implementing the acute coronary syndrome (ACS) standard protocol?

1. Creatine kinase MB level
2. Troponin I level
3. Myoglobin level
4. C-reactive protein level

2. You are monitoring a 53-year-old client who is undergoing a treadmill stress test. Which client finding will require the most immediate action?

1. Blood pressure of 152/88 mm Hg
2. Heart rate of 134 beats/min
3. Oxygen saturation of 91%
4. Chest pain level of 3 (on a scale of 10)

3. The health care provider prescribes these actions for a client who was admitted with acute substernal chest pain. Which actions are appropriate to delegate to an experienced LPN/LVN who is working with you in the ED? (*Select all that apply.*)

1. Attaching cardiac monitor leads
2. Giving heparin 5000 units IV push
3. Administering morphine sulfate 4 mg IV
4. Obtaining a 12-lead electrocardiogram (ECG)
5. Asking the client about pertinent medical history
6. Having the client chew and swallow aspirin 162 mg

4. Based on this information in a client's medical record, which topic will you plan on including in the initial teaching plan for a client who has a new diagnosis of stage 1 hypertension?

Health History

- Denies any chronic health problems
- Takes no medications currently

Physical Exam

- Height: 5 feet, 6 inches
- Weight: 115 lb (52.3 kg)
- BMI: 18.6

Social and Diet History

- Works as an accountant
- 1 glass of wine once or twice weekly
- Eats "fast food" frequently

1. Benefits and adverse effects of beta-blockers
2. Adverse effects of alcohol on blood pressure
3. Methods for decreasing dietary caloric intake
4. Low-sodium food choices when eating out

5. You make a home visit to evaluate a hypertensive client who has been taking enalapril (Vasotec). Which finding indicates that you need to contact the health care provider about a change in the drug therapy?

1. Client reports frequent urination.
2. Client's blood pressure is 138/86 mm Hg.
3. Client coughs often during the visit.
4. Client says, "I get dizzy sometimes."

6. While admitting a client, you obtain this information about her cardiovascular risk factors: Her mother and two siblings have had myocardial infarctions (MIs). The client smokes and has a 20 pack-year history of cigarette use. Her work as a mail carrier involves a lot of walking. She takes metoprolol (Lopressor) for hypertension, and her blood pressure has been in the range of 130/60 to 138/85 mm Hg. Which interventions will be important to include in the discharge plan for this client? (*Select all that apply.*)
1. Referral to community programs that assist in smoking cessation
 2. Teaching about the impact of family history on cardiovascular risk
 3. Education about the need for a change in antihypertensive therapy
 4. Assistance in reducing the stress associated with her cardiovascular risk
 5. Discussion of the risks associated with having a sedentary lifestyle
7. You are the charge nurse for the coronary care step-down unit. Which client is best to assign to a float RN who has come for the day from the general medical-surgical unit?
1. Client requiring discharge teaching about coronary artery stenting before going home today
 2. Client receiving IV furosemide (Lasix) to treat acute left ventricular failure
 3. Client who just transferred in from the radiology department after a coronary angioplasty
 4. Client just admitted with unstable angina who has orders for a heparin infusion and aspirin
8. At 9:00 PM, you admit a 63-year-old with a diagnosis of acute MI. Which finding is most important to communicate to the health care provider who is considering the use of fibrinolytic therapy with tissue plasminogen activator (alteplase [Activase]) for the client?
1. The client was treated with alteplase about 8 months ago.
 2. The client takes famotidine (Pepcid) for esophageal reflux.
 3. The client has ST-segment elevations on the 12-lead ECG.
 4. The client has had continuous chest pain since 8:00 AM.
9. You are working with an experienced UAP and an LPN/LVN on the telemetry unit. A client who had an acute MI 3 days ago has a nursing diagnosis of Activity Intolerance related to fatigue and chest pain. Which nursing activity included in the care plan is best delegated to the LPN/LVN?
1. Administering nitroglycerin (Nitrostat) if chest discomfort occurs during client activities
 2. Monitoring pulse, blood pressure, and oxygen saturation before and after client ambulation
 3. Teaching the client energy conservation techniques to decrease myocardial oxygen demand
 4. Explaining the rationale for alternating rest periods with exercise to the client and family
10. You are working in the ED caring for a client who was just admitted with left anterior chest pain, possible ACS. Which action will you take first?
1. Insert an IV catheter.
 2. Auscultate heart sounds.
 3. Administer sublingual nitroglycerin.
 4. Draw blood for troponin I measurement.
11. An 80-year-old client on the coronary step-down unit tells you that he does not want to take the ordered docusate (Colace) because he does not have any problems with constipation. Which action is most appropriate?
1. Document the medication on the client's chart as "refused."
 2. Mix the medication with food and administer it to the client.
 3. Explain that his decreased activity level may cause constipation.
 4. Reinforce that the docusate has been prescribed for a good reason.
12. You have given morphine sulfate 4 mg IV to a client who has an acute MI. When you evaluate the client's response 5 minutes after giving the medication, which finding indicates a need for immediate further action?
1. Blood pressure decrease from 114/65 to 106/58 mm Hg
 2. Respiratory rate drop from 18 to 12 breaths/min
 3. Cardiac monitor indicating sinus rhythm at a rate of 96 beats/min
 4. Persisting chest pain at a level of 1 (on a scale of 0 to 10)

13. You are preparing to implement teaching about a heart-healthy diet and activity levels for a client who has had an MI and her husband. The client says, "I don't see why I need any teaching. I don't think I need to change anything right now." Which response is most appropriate?
 1. "Do you think your family may want you to make some lifestyle changes?"
 2. "Can you tell me why you don't feel that you need to make any changes?"
 3. "You are still in the stage of denial, but you will want this information later on."
 4. "Even though you don't want to change, it's important that you have this teaching."
14. You are caring for a hospitalized client with heart failure who is receiving captopril (Capoten) and spironolactone (Aldactone). Which laboratory value will be most important to monitor?
 1. Sodium level
 2. Blood urea nitrogen level
 3. Potassium level
 4. Alkaline phosphatase level
15. The health care provider telephones you with new prescriptions for a client with unstable angina who is already taking clopidogrel (Plavix). Which medication is most important to clarify further with the health care provider?
 1. Aspirin (Ecotrin) 162 mg daily
 2. Omeprazole (Prilosec) 20 mg daily
 3. Metoprolol (Lopressor) 50 mg daily
 4. Nitroglycerin patch (Nitrodur) 0.4 mg/hr
16. At 10:00 AM, a hospitalized client receives a new order for transesophageal echocardiography (TEE) as soon as possible. Which action will you take first?
 1. Put the client on "nothing by mouth" (NPO) status.
 2. Teach the client about the procedure.
 3. Insert an IV catheter in the client's forearm.
 4. Attach the client to a cardiac monitor.
17. You assess a client who has just returned to the recovery area after undergoing coronary arteriography. Which information is of most concern?
 1. Blood pressure is 144/78 mm Hg
 2. Pedal pulses are palpable at +1
 3. Left groin has a 3-cm bruised area
 4. Apical pulse is 122 beats/min and regular
18. You are working in an outpatient clinic where many vascular diagnostic tests are performed. Which task associated with vascular testing is most appropriate to delegate to an experienced UAP?
 1. Measuring ankle and brachial pressures in a client for whom the ankle-brachial index is to be calculated
 2. Checking blood pressure and pulse every 10 minutes in a client who is undergoing exercise testing
 3. Obtaining information about allergies from a client who is scheduled for left leg contrast venography
 4. Providing brief client teaching for a client who will undergo a right subclavian vein Doppler study
19. While working on the cardiac step-down unit, you are serving as preceptor to a newly graduated RN who has been in a 6-week orientation program. Which client will be best to assign to the new graduate?
 1. 19-year-old with rheumatic fever who needs discharge teaching before going home with a roommate today
 2. 33-year-old admitted a week ago with endocarditis who will be receiving ceftriaxone (Rocephin) 2 g IV
 3. 50-year-old with newly diagnosed stable angina who has many questions about medications and nursing care
 4. 75-year-old who has just been transferred to the unit after undergoing coronary artery bypass grafting yesterday
20. You are monitoring the cardiac rhythms of clients in the coronary care unit. Which client will need immediate intervention?
 1. Client admitted with heart failure who has atrial fibrillation with a rate of 88 beats/min while at rest
 2. Client with a newly implanted demand ventricular pacemaker who has occasional periods of sinus rhythm at a rate of 90 to 100 beats/min
 3. Client who has just arrived on the unit with an acute MI and has sinus rhythm at a rate of 76 beats/min with frequent premature ventricular contractions
 4. Client who recently started taking atenolol (Tenormin) and has a first-degree heart block, with a rate of 58 beats/min
21. Ventricular fibrillation is identified in an unresponsive 50-year-old client who has just arrived in the ED. Which action will you take first?
 1. Defibrillate at 200 J.
 2. Start cardiopulmonary resuscitation (CPR).
 3. Administer epinephrine (Adrenalin) 1 mg IV.
 4. Intubate and manually ventilate.

- Common Health Scenarios
PART 2
22. Two weeks ago, a 63-year-old client with heart failure received a new prescription for carvedilol (Coreg) 3.125 mg orally. When evaluating the client in the cardiology clinic, you obtain the following data. Which finding is of most concern?
 1. Reports of increased fatigue and activity intolerance
 2. Weight increase of 0.5 kg over a 1-week period
 3. Sinus bradycardia at a rate of 48 beats/min
 4. Traces of edema noted over both ankles
 23. You have just received a change-of-shift report about these clients on the coronary step-down unit. Which one will you assess first?
 1. 26-year-old with heart failure caused by congenital mitral stenosis who is scheduled for balloon valvuloplasty later today
 2. 45-year-old with constrictive cardiomyopathy who developed acute dyspnea and agitation about 1 hour before the shift change
 3. 56-year-old who underwent coronary angioplasty and stent placement yesterday and has reported occasional chest pain since the procedure
 4. 77-year-old who was transferred from the intensive care unit 2 days ago after coronary artery bypass grafting and has a temperature of 100.6° F (38.1° C)
 24. As the charge nurse in a long-term care facility that employs RNs, LPNs/LVNs, and UAPs, you have developed a plan for the ongoing assessment of all residents with a diagnosis of heart failure. Which activity included in the plan is most appropriate to delegate to an LPN/LVN team member?
 1. Weighing all residents with heart failure each morning
 2. Listening to lung sounds and checking for edema each week
 3. Reviewing all heart failure medications with residents every month
 4. Updating activity plans for residents with heart failure every quarter
 25. During a home visit to an 88-year-old client who is taking digoxin (Lanoxin) 0.25 mg daily to treat heart failure and atrial fibrillation, you obtain this assessment information. Which finding is most important to communicate to the health care provider?
 1. Apical pulse of 68 beats/min and irregularly irregular
 2. Digoxin taken with meals
 3. Vision that is becoming "fuzzy"
 4. Lung crackles that clear after coughing
 26. You are ambulating a cardiac surgery client who has a telemetry cardiac monitor when another staff member tells you that the client has developed supraventricular tachycardia at a rate of 146 beats/min. In which order will you take the following actions?
 1. Call the client's physician.
 2. Have the client sit down.
 3. Check the client's blood pressure.
 4. Administer PRN oxygen by nasal cannula.
 27. A client who has endocarditis with vegetation on the mitral valve suddenly reports severe left foot pain. You note that no pulse is palpable in the left foot and that it is cold and pale. Which action should you take next?
 1. Lower the client's left foot below heart level.
 2. Administer oxygen at 4 L/min to the client.
 3. Notify the client's physician about the change in status.
 4. Reassure the client that embolization is common in endocarditis.
 28. A resident in a long-term care facility who has venous stasis ulcers is treated with an Unna boot. Which nursing activity included in the resident's care is best for you to delegate to the UAP?
 1. Teaching family members the signs of infection
 2. Monitoring capillary perfusion once every 8 hours
 3. Evaluating foot sensation and movement each shift
 4. Assisting the client in cleaning around the Unna boot
 29. During the initial postoperative assessment of a client who has just been transferred to the postanesthesia care unit after repair of an abdominal aortic aneurysm, you obtain these data. Which finding has the most immediate implications for the client's care?
 1. Arterial line indicates a blood pressure of 190/112 mm Hg.
 2. Cardiac monitor shows frequent premature atrial contractions.
 3. There is no response to verbal stimulation.
 4. Urine output is 40 mL of amber urine.

30. You are developing a standardized care plan for the postoperative care of clients undergoing cardiac surgery. Which nursing activity included in the care plan will need to be performed by RN staff members?
1. Removing chest and leg dressings on the second postoperative day and cleaning the incisions with antibacterial swabs
 2. Reinforcing client and family teaching about the need to deep breathe and cough at least every 2 hours while awake
 3. Developing an individual plan for discharge teaching based on discharge medications and needed lifestyle changes
 4. Administering oral analgesic medications as needed before helping the client out of bed on the first postoperative day
31. You are preparing to administer the following medications to a client with multiple health problems who has been hospitalized with deep vein thrombosis. Which medication is most important to double-check with another licensed nurse?
1. Famotidine (Pepcid) 20 mg IV
 2. Furosemide (Lasix) 40 mg IV
 3. Digoxin (Lanoxin) 0.25 mg PO
 4. Warfarin (Coumadin) 2.5 mg PO
32. A client seen in the clinic with shortness of breath and fatigue is being evaluated for a possible diagnosis of heart failure. Which laboratory result will be most useful to monitor?
1. Serum potassium
 2. B-type natriuretic peptide
 3. Blood urea nitrogen
 4. Hematocrit