

N431 Care Plan #3

Lakeview College of Nursing

Morgan Drennan

**Demographics (3 points)**

|   |  |                                   |                                |
|---|--|-----------------------------------|--------------------------------|
| <b>Date of Admission</b><br>10/11/20            | <b>Patient Initials</b><br>R.O.            | <b>Age</b><br>54                  | <b>Gender</b><br>Male          |
| <b>Race/Ethnicity</b><br>Caucasian/Non-Hispanic | <b>Occupation</b><br>Gas Station Attendant | <b>Marital Status</b><br>divorced | <b>Allergies</b><br>Penicillin |
| <b>Code Status</b><br>Full                      | <b>Height</b><br>5' 10"                    | <b>Weight</b><br>220 lbs          |                                |

**Medical History (5 Points)****Past Medical History:**

Hypertension

Hypercholesterolemia

Obesity

**Past Surgical History:** Appendectomy (2/2007)

**Family History:** Maternal- diabetes, Paternal-MI stent placement, Sister- Obesity

**Social History (tobacco/alcohol/drugs):** Patient reports that he smokes 1 pack per day and has for 30 years. Patient also reports that he drinks “a few beers on the weekends” but does not specify how many. (Other drugs were not reported in scenario)

**Assistive Devices:** Patient does not have any assistive devices currently

**Living Situation:** Patient lives in his home alone.

**Education Level:** Patient has obtained a high school education and does not report any other education.

**Admission Assessment**

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**Chief Complaint (2 points):** substernal chest pain and nausea

**History of present Illness (10 points):**

The patient presented to the Emergency Department with complaint of substernal chest pain and nausea. The client stated that the pain began 1-hour prior. The patient does not indicate any characteristics other than the substernal chest pain is constant. There are no aggravating or relieving factors noted. The patient has not taken any medication to help with the chest pain. The severity of the pain was enough to bring patient into the emergency department to get checked out.

### **Primary Diagnosis**

**Primary Diagnosis on Admission (2 points):** ST elevation myocardial infarction (STEMI)

**Secondary Diagnosis (if applicable):** N/A

**Pathophysiology of the Disease, APA format (20 points):**

### **Pathophysiology**

ST elevated myocardial infarction (STEMI) is one of the two types of myocardial infarction, and the second type is known as Non-ST elevated myocardial infarction (NSTEMI). Myocardial infarction and unstable angina make up what is known as acute coronary syndrome. Coronary artery occlusion that leads to ischemia, which is a complete or inadequate lack of oxygen reaching the cardiac cells, causes myocardial infarction. It is the prolonged lack of oxygen to the cardiac tissue that truly causes the myocardial infarction (Capriotti & Frizzell, 2016).

When the myocardial tissue is hypoxic for too long without recovery, it is known as ischemic necrosis and simply means death of the tissue (Capriotti & Frizzell, 2016).

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This patient presented to the emergency department with substernal chest pain and nausea which can indicate a higher myocardial oxygen demand during a myocardial infarction (Hinkle & Cheever, 2017). If the oxygen demand is greater than the oxygen available to the myocardial tissue, ischemia will happen and it can lead to myocardial infarction. An stat EKG was performed in the emergency department and revealed ST-elevation and the patient then was diagnosed with ST elevation myocardial infarction (STEMI).

### **Signs and Symptoms**

Signs and symptoms of myocardial infarction are anxiety, diaphoresis, extreme anxiety, weak pulses, chest pain, and crushing chest pain that radiates to the back, neck, , nausea, and crushing chest pain. This patient presented with substernal chest pain and nausea. The patient's family history of the father having a heart attack with stent paced, the patient's past medical history of having Hypertension, hypercholesterolemia, obesity are all high-risk factors for myocardial infarction and heart failure (Hinkle & Cheever, 2017

### **Expected Findings**

In certain myocardial infarctions, rhythm changes, such as ST elevation, can be observed on an EKG.

### **Diagnostic and Lab Test**

Diagnostic tests, such as the transthoracic echo, are ordered to see the heart size and which part of the heart has been affected by the Myocardial infarction. Another diagnostic test ordered is EKG, which tells if a myocardial infarction has already occurred, if there is ST elevation or not, and cannot diagnose without accompanying blood lab results. An echocardiogram was also performed on this patient to determine the extent of damage to the

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myocardial tissue and the result revealed ST elevation (Van Leeuwen & Bladh, 2017). Blood test performed to diagnose Myocardial infarction are CK-MB and Troponin (Van Leeuwen & Bladh, 2017). Serum troponin levels are often used to diagnose myocardial infarction using the reference range of 0.0-0.04. When heart tissue dies, proteins are released in the blood and are present around 4 hours after the MI occurs and are in the blood for approximately four days (Van Leeuwen & Bladh, 2017). An EKG was performed in the emergency department and revealed ST-elevation. This patient's Troponin was 0.98 and CKMB was 42.

### **Treatments**

Medications to treat myocardial infarction are aspirin as an antiplatelet aggregation agent, blood-thinning medications, blood pressure medications or doses changes of blood pressure medications may be adjusted to lower blood pressure. Beta blocker, statins, pain relievers, and nitro are other medications used to treat STEMI (Van Leeuwen & Bladh, 2017).

### **Pathophysiology References (2) (APA):**

Capriotti, T. & Frizzell, J.P. (2016). *Pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis.

Hinkle, J. L., & Cheever, K. H. (2017). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). LWW.

Mayo Clinic Staff. (2020 June 16). *Heart attack*. <https://www.mayoclinic.org/diseases-conditions/heart-attack/symptoms-causes/syc-20373106>

Van Leeuwen, A. M., & Bladh, M. L. (2017). *Davis's comprehensive handbook of laboratory and diagnostic tests with nursing implications* (7th ed.). F.A. Davis Company.

**Laboratory Data (15 points)**

**CBC Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| <b>Lab</b>         | <b>Normal Range</b> | <b>Admission Value</b> | <b>Today's Value</b> | <b>Reason for Abnormal Value</b> |
|--------------------|---------------------|------------------------|----------------------|----------------------------------|
| <b>RBC</b>         | 4.40-5.8            | Not drawn              | Not drawn            | Not drawn                        |
| <b>Hgb</b>         | 13.0-16.5           | 13.1                   | Not drawn            | Not drawn                        |
| <b>Hct</b>         | 38-50               | Not drawn              | Not drawn            | Not drawn                        |
| <b>Platelets</b>   | 140-440             | Not drawn              | Not drawn            | Not drawn                        |
| <b>WBC</b>         | 4-12                | 6.3                    | Not drawn            | WNL                              |
| <b>Neutrophils</b> | 48-60               | Not drawn              | Not drawn            | Not drawn                        |
| <b>Lymphocytes</b> | 19-49               | Not drawn              | Not drawn            | Not drawn                        |
| <b>Monocytes</b>   | 3-13                | Not drawn              | Not drawn            | Not drawn                        |
| <b>Eosinophils</b> | 0-8                 | Not drawn              | Not drawn            | Not drawn                        |
| <b>Bands</b>       | <1                  | Not drawn              | Not drawn            | Not drawn                        |

**Chemistry Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| <b>Lab</b> | <b>Normal Range</b> | <b>Admission Value</b> | <b>Today's Value</b> | <b>Reason for Abnormal</b> |
|------------|---------------------|------------------------|----------------------|----------------------------|
| <b>Na-</b> | 133-144             | 135                    | Not drawn            | WNL                        |
| <b>K+</b>  | 3.5-5.0             | 3.6                    | Not drawn            | WNL                        |
| <b>Cl-</b> | 98-107              | Not drawn              | Not drawn            | Not drawn                  |

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|--------------------|----------|-----------|-----------|---|
| <b>CO2</b>         | 21-31    | Not drawn | Not drawn | Not drawn   |
| <b>Glucose</b>     | 70-100   | 171       | Not drawn | This increase in glucose is related to stress on the body (Pagana & Pagana, 2010).<br><br>Since the patient's mother has diabetes and the patient is obese, a Hemoglobin A1C would be a great lab to draw once the patient is stable. |
| <b>BUN</b>         | 7-25     | 10        | Not drawn | WNL   |
| <b>Creatinine</b>  | 0.5-1.2  | 1.53      | Not drawn | This increase is related to the stress that the body is under (Pagana & Pagana, 2010).  |
| <b>Albumin</b>     | 3.5-5.7  | Not drawn | Not drawn | Not drawn   |
| <b>Calcium</b>     | 8.8-10.2 | Not drawn | Not drawn | Not drawn   |
| <b>Mag</b>         | 1.6-2.6  | Not drawn | Not drawn | Not drawn   |
| <b>Phosphate</b>   | 3.0-4.5  | Not drawn | Not drawn | Not drawn   |
| <b>Bilirubin</b>   | 0.2-0.8  | Not drawn | Not drawn | Not drawn   |
| <b>Alk Phos</b>    | 34-104   | Not drawn | Not drawn | Not drawn   |
| <b>AST</b>         | 13-39    | Not drawn | Not drawn | Not drawn   |
| <b>ALT</b>         | 7-52     | Not drawn | Not drawn | Not drawn   |
| <b>Amylase</b>     | 60-120   | Not drawn | Not drawn | Not drawn   |
| <b>Lipase</b>      | 0-160    | Not drawn | Not drawn | Not drawn   |
| <b>Lactic Acid</b> | 5-202    | Not drawn | Not drawn | Not drawn   |
| <b>Troponin</b>    | 0.0-0.05 | 0.98      | Not drawn | This elevation is related to the myocardial infarction the client is experiencing (Pagana & Pagana,   |

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|                 |        |           |           |  |
|-----------------|--------|-----------|-----------|--|
|                 |        |           |           | 2010).   |
| <b>CK-MB</b>    | 5-25   | 42        | Not drawn | This elevation is related to the myocardial infarction the client is experiencing (Pagana & Pagana, 2010). |
| <b>Total CK</b> | 22-198 | Not drawn | Not drawn | Not drawn  |

**Other Tests** **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| <b>Lab Test</b>      | <b>Normal Range</b> | <b>Value on Admission</b> | <b>Today's Value</b> | <b>Reason for Abnormal</b> |
|----------------------|---------------------|---------------------------|----------------------|----------------------------|
| <b>INR</b>           | 0.8-1.1             | Not drawn                 | Not drawn            | Not drawn                  |
| <b>PT</b>            | 10.1-13.1           | Not drawn                 | Not drawn            | Not drawn                  |
| <b>PTT</b>           | 60-70               | Not drawn                 | Not drawn            | Not drawn                  |
| <b>D-Dimer</b>       | <0.4                | Not drawn                 | Not drawn            | Not drawn                  |
| <b>BNP</b>           | <100                | Not drawn                 | Not drawn            | Not drawn                  |
| <b>HDL</b>           | 40-59               | Not drawn                 | Not drawn            | Not drawn                  |
| <b>LDL</b>           | <130                | Not drawn                 | Not drawn            | Not drawn                  |
| <b>Cholesterol</b>   | <200                | Not drawn                 | Not drawn            | Not drawn                  |
| <b>Triglycerides</b> | <150                | Not drawn                 | Not drawn            | Not drawn                  |
| <b>Hgb A1c</b>       | 4.0-6.0             | Not drawn                 | Not drawn            | Not drawn                  |
| <b>TSH</b>           | 0.270-4.200         | Not drawn                 | Not drawn            | Not drawn                  |

**Urinalysis** **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| <b>Lab Test</b>            | <b>Normal Range</b> | <b>Value on Admission</b> | <b>Today's Value</b> | <b>Reason for Abnormal</b> |
|----------------------------|---------------------|---------------------------|----------------------|----------------------------|
| <b>Color &amp; Clarity</b> | Yellow & clear      | Not drawn                 | Not drawn            | Not drawn                  |
| <b>pH</b>                  | 4.6-8.0             | Not drawn                 | Not drawn            | Not drawn                  |

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|-------------------------|-------------|-----------|-----------|-----------|
| <b>Specific Gravity</b> | 1.005-1.030 | Not drawn | Not drawn | Not drawn |
| <b>Glucose</b>          | Negative    | Not drawn | Not drawn | Not drawn |
| <b>Protein</b>          | 0-8         | Not drawn | Not drawn | Not drawn |
| <b>Ketones</b>          | Negative    | Not drawn | Not drawn | Not drawn |
| <b>WBC</b>              | 0-4         | Not drawn | Not drawn | Not drawn |
| <b>RBC</b>              | <2          | Not drawn | Not drawn | Not drawn |
| <b>Leukoesterase</b>    | negative    | Not drawn | Not drawn | Not drawn |

Arterial Blood Gas **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| <b>Test</b>  | <b>Normal Range</b> | <b>Value on Admission</b> | <b>Today's Value</b> | <b>Explanation of Findings</b> |
|--------------|---------------------|---------------------------|----------------------|--------------------------------|
| <b>pH</b>    | 7.35-7.45           | Not drawn                 | Not drawn            | Not drawn                      |
| <b>PaO2</b>  | 75-100              | Not drawn                 | Not drawn            | Not drawn                      |
| <b>PaCO2</b> | 35-45               | Not drawn                 | Not drawn            | Not drawn                      |
| <b>HCO3</b>  | 21-28               | Not drawn                 | Not drawn            | Not drawn                      |
| <b>SaO2</b>  | 94-100              | Not drawn                 | Not drawn            | Not drawn                      |

Cultures **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| <b>Test</b>           | <b>Normal Range</b> | <b>Value on Admission</b> | <b>Today's Value</b> | <b>Explanation of Findings</b> |
|-----------------------|---------------------|---------------------------|----------------------|--------------------------------|
| <b>Urine Culture</b>  | Negative            | Not drawn                 | Not drawn            | Not drawn                      |
| <b>Blood Culture</b>  | negative            | Not drawn                 | Not drawn            | Not drawn                      |
| <b>Sputum Culture</b> | negative            | Not drawn                 | Not drawn            | Not drawn                      |
| <b>Stool Culture</b>  | negative            | Not drawn                 | Not drawn            | Not drawn                      |

**Lab Correlations Reference (APA):**

Pagana, K. & Pagana, T. (2010). *Mosby's Manual of Diagnostic and Laboratory Tests*. (4<sup>th</sup> ed.). Elsevier.

**Diagnostic Imaging****All Other Diagnostic Tests (5 points):**

A chest X-ray was completed to look for cardiac abnormalities. An EKG was performed to indicate how well the heart was conducting electricity. A cardiac catheterization with fluoroscopy was also conducted to view the arteries.

**Diagnostic Test Correlation (5 points):**

A chest X-ray was completed so that the heart could be viewed to see if there were any abnormalities with this patients' heart. The X-ray showed that there were no abnormalities present in the heart and that the heart size was in defined limits (Pagana & Pagana, 2010). An EKG shows the electrical impulses and determines if there are any abnormalities occurring with the conductivity of the heart. This patients' EKG proved that this patient was in fact having a heart attack by showing that there was an elevated ST presenting in leads I, II, and AVF. A cardiac catheterization was also performed to visualize the arteries in the body. In the case of this patient the cardiac catheterization showed that there was a 95% blockage of the right coronary artery. This catheterization showed the need for a stent to be placed. Fluoroscopy that was used during the cardiac catheterization showed improved blood flow after the placement of the stent (Pagana & Pagana, 2010).

**Diagnostic Test Reference (APA):**

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Pagana, K. & Pagana, T. (2010). *Mosby's Manual of Diagnostic and Laboratory Tests*. (4<sup>th</sup> ed.).

Elsevier.

**Current Medications (10 points, 1 point per completed med)  
\*10 different medications must be completed\***

**Home Medications (5 required)**

|   |   |   |  |  |  |
|---|---|---|--|--|--|
| <b>Brand/Generic</b>                      | Prinivil/<br>Lisinopril   | Lipitor/<br>Atorvastatin  | Bayer/<br>aspirin  | Nitrostat/<br>nitroglycerin  | Tylenol/<br>Acetaminophen  |
| <b>Dose</b>                               | 10 mg   | 20 mg   | 81 mg  | 0.4 mg   | 650 mg   |
| <b>Frequency</b>                          | BID   | Daily   | Daily  | PRN  | Q6H PRN  |
| <b>Route</b>                              | PO  | PO  | PO   | SL   | PO   |
| <b>Classification</b>                     | Anti-<br>hypertensive   | Anti-<br>hyperlipidemic   | Anti-<br>inflammatory  | Anti-<br>hypertensive  | analgesic  |
| <b>Mechanism of Action</b>                | Decreases the release of aldosterone which reduces water and sodium reabsorption, reducing BP | Increases number of LDL receptors to enhance LDL uptake and breakdown | Inhibits prostaglandin synthesis which causes pain and swelling to subside | Causes vasodilation which decreases venous return to the heart which reduces pressure in the left ventricle and pulmonary artery | Blocks prostaglandin production and interferes with pain impulse generation in the peripheral nervous system |
| <b>Reason Client Taking</b>               | hypertension  | Hyper-<br>cholester-<br>olemia  | Prevent<br>platelet<br>aggregation   | Chest pain   | Pain/ fever  |
| <b>Contraindications (2)</b>              | Hypersensitivity to lisinopril; hereditary or idiopathic angioedema                           | Active hepatic disease; unexplained rise in serum transaminase level  | Asthma; bleeding problems like hemophilia                                  | Severe anemia, orthostatic hypotension   | Severe hepatic impairment, severe active liver disease   |
| <b>Side Effects/Adverse Reactions (2)</b> | Fluid overload; angina  | Colitis; dysphagia  | Confusion; increased bleeding time   | Pneumonia, edema   | Peripheral edema, dyspnea  |
| <b>Nursing Considerations (2)</b>         | Notify the provider of a persistent, nonproductive  | Monitor blood glucose; use caution in patients who                    | Monitor renal function; do not crush drug unless                           | Make sure nitro dissolves completely;  | Monitor renal function; inform patient of the signs of   |

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|   | cough; crackles may be present in the lungs   | drink alcohol   | directed  | place patient in sitting position  | hepatotoxicity like bleeding   |
| <b>Key Nursing Assessment(s)/Lab(s) Prior to Administration</b> | Monitor BP  | Liver function tests; lipid panel   | Assess pain   | Monitor BP   | Liver function tests   |
| <b>Client Teaching needs (2)</b>                                | Teach the client how to take their blood pressure; educate client on how to record her blood pressure and the normal parameters of blood pressure | Educate client about a low-fat diet; instruct the client to take the medication at the same time every day. | Advise the patient to take this medication with food to prevent GI upset; educate patient to not take ibuprofen while taking aspirin. | Educate the patient on how to take Nitro (1 every 5 minutes for 15 minutes); educate the patient to call EMS after the 1 <sup>st</sup> dosage of nitro is administered at home in case of rapid BP decrease. | Take medication as directed on the bottle; take with food to avoid stomach upset.<br><br>(Jones & Bartlett, 2019). |

**Hospital Medications (5 required)**

|                             |   |   |                             |   |  |
|-----------------------------|---|---|-----------------------------|---|--|
| <b>Brand/Generic</b>        | Heparin/<br>Heparin Sodium  | Zofran/<br>ondansetron                  | Colace/<br>Docusate Sodium  | Normal saline/<br>sodium chloride   | Plavix/<br>clopidogrel   |
| <b>Dose</b>                 | 5,000 units   | 4 mg                                    | 100 mg                      | 125mL/hr  | 75 mg  |
| <b>Frequency</b>            | BID   | Q6H PRN                                 | BID PRN                     | continuous  | BID  |
| <b>Route</b>                | SQ  | SL                                      | PO                          | IV  | PO   |
| <b>Classification</b>       | Anti-coagulant  | antiemetic                              | laxative                    | Crystalloid fluid   | Platelet inhibitor   |
| <b>Mechanism of Action</b>  | Inhibits coagulation factors preventing the formation of thrombin | Prevent serotonin release to intestines | Surfactant to soften stools | Help prevent blockage in the vein and cleans out the IV catheter by flushing the saline through the vein and IV | Binds with ADP receptors on platelets, which blocks fibrinogen from forming, so a clot cannot form |
| <b>Reason Client Taking</b> | Prevent clots from forming  | nausea                                  | constipation                | Minimize risk of blockage   | Reduce risk of an MI occurring   |
| <b>Contraindications</b>    | Inability to  | Congenital                              | Nausea; fecal               | Congestive  | Active   |

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| (2)   | monitor coagulation; uncontrolled active bleeding  | long QT syndrome; hypersensitivity to ondansetron   | impaction   | heart failure, severe renal impairment                                  | bleeding; allergic to clopidogrel   |
| <b>Side Effects/Adverse Reactions (2)</b>                       | Thrombosis; easy bruising  | Cardiac arrest; angina  | Palpitations; dizziness   | Fever; venous thrombus  | Chest pain; edema   |
| <b>Nursing Considerations (2)</b>                               | Give only by IV or SQ; expect to adjust the dosage   | Monitor patient for serotonin syndrome; administer medication as soon as the package is open because quick disintegration | Expect long term use to cause dependence; assess for laxative abuse syndrome                | May cause hypotension; don't give to those with increased ICP           | Discourage the use of NSAID; expect to give aspirin with clopidogrel  |
| <b>Key Nursing Assessment(s)/Lab(s) Prior to Administration</b> | Obtain PTT after 8 hours of therapy  | Monitor potassium levels; assess bowel sounds after administration  | Monitor bowel sounds  | Monitor ICP; monitor for signs of fluid volume deficit                  | Monitor CBC   |
| <b>Client Teaching needs (2)</b>                                | Educate patient to use a soft-bristled tooth brush; advise patient to avoid aspirin and ibuprofen. | Advise patient to report signs of a rash. Advise patient to seek help if her symptoms worsen.                             | Advise patient to take with full glass of water; encourage patient to increase fiber intake | Flush every time the catheter is used; store saline at room temperature | Educate the patient that bleeding time could be longer; advise patient to tell all healthcare providers that the patient is on clopidogrel<br><br>(Jones & Bartlett, 2019). |

**Medications Reference (APA):**

Jones & Bartlett Learning. (2019). *2019 Nurses drug handbook (18<sup>th</sup> ed)*. Burlington, MA.

**Assessment**

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**Physical Exam (18 points)**

|   |   |
|---|---|
| <b>GENERAL (1 point):</b><br><b>Alertness:</b><br><b>Orientation:</b><br><b>Distress:</b><br><b>Overall appearance:</b>   | AOx4<br>No current signs of distress after Tylenol was administered<br>Overall appearance is appropriate  |
| <b>INTEGUMENTARY (2 points):</b><br><b>Skin color:</b><br><b>Character:</b><br><b>Temperature:</b><br><b>Turgor:</b><br><b>Rashes:</b><br><b>Bruises:</b><br><b>Wounds:</b><br><b>Braden Score:</b><br><b>Drains present:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br><b>Type:</b>  | Skin color is consistent with ethnicity and is intact. Skin is warm and dry. Turgor is less than 3 seconds. There are no rashes, bruises, or wounds present. Braden score is 19. No drains are present.   |
| <b>HEENT (1 point):</b><br><b>Head/Neck:</b><br><b>Ears:</b><br><b>Eyes:</b><br><b>Nose:</b><br><b>Teeth:</b>   | Head and neck are symmetrical. Sclera is white and conjunctiva is pink and moist with no drainage present. Ears are symmetrical. Nose is midline with no drainage present. Dentition is intact.   |
| <b>CARDIOVASCULAR (2 points):</b><br><b>Heart sounds:</b><br><b>S1, S2, S3, S4, murmur etc.</b><br><b>Cardiac rhythm (if applicable):</b><br><b>Peripheral Pulses:</b><br><b>Capillary refill:</b><br><b>Neck Vein Distention:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br><b>Edema</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br><b>Location of Edema:</b> | S1 and S2 are present with no gallops or murmurs present. Peripheral pulses are strong at 2+. Capillary refill is less than 3 seconds. No neck vein distention or edema present.  |
| <b>RESPIRATORY (2 points):</b><br><b>Accessory muscle use:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br><b>Breath Sounds: Location, character</b>  | The airway is patent, with no accessory muscle use. Breath sounds are clear bilaterally.  |
| <b>GASTROINTESTINAL (2 points):</b><br><b>Diet at home:</b><br><b>Current Diet</b><br><b>Height:</b><br><b>Weight:</b><br><b>Auscultation Bowel sounds:</b><br><b>Last BM:</b>  | The patient's diet at home is a normal diet and the current diet being used is a cardiac diet. Height is 5' 10" and weight is 220 lbs. Bowel sounds are present in all four quadrants. The patient's last bowel movement was 10/11/2020. There are no masses or pain upon palpation of the abdomen. There is no distention, incisions, scars, |

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|---|---|
| <p><b>Palpation: Pain, Mass etc.:</b><br/> <b>Inspection:</b><br/> <b>Distention:</b><br/> <b>Incisions:</b><br/> <b>Scars:</b><br/> <b>Drains:</b><br/> <b>Wounds:</b><br/> <b>Ostomy:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Nasogastric:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Size:</b><br/> <b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Type:</b></p>  | <p>drains or wounds present. There is no ostomy, nasogastric, or feeding tube present.</p>  |
| <p><b>GENITOURINARY (2 Points):</b><br/> <b>Color:</b><br/> <b>Character:</b><br/> <b>Quantity of urine:</b><br/> <b>Pain with urination:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Dialysis:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Inspection of genitals:</b><br/> <b>Catheter:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Type:</b><br/> <b>Size:</b></p>  | <p>The color of the urine is a pale yellow. The character of the urine is clear. The quantity of urine is 800 mL. There is no pain with urination and no dialysis. The genitals are intact and appropriate for male genitalia. There is no catheter being used.</p>   |
| <p><b>MUSCULOSKELETAL (2 points):</b><br/> <b>Neurovascular status:</b><br/> <b>ROM:</b><br/> <b>Supportive devices:</b><br/> <b>Strength:</b><br/> <b>ADL Assistance:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Fall Risk:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/> <b>Fall Score:</b><br/> <b>Activity/Mobility Status:</b><br/> <b>Independent (up ad lib)</b> <input checked="" type="checkbox"/><br/> <b>Needs assistance with equipment</b> <input type="checkbox"/><br/> <b>Needs support to stand and walk</b> <input type="checkbox"/></p> | <p>Active ROM<br/> The patient does not use any supportive devices.<br/> Strength is equal bilaterally<br/> ADL assistance is not needed<br/> The patient is a fall risk with a fall score of 20.<br/> Patient does have a cardiac catheterization site on the left femoral with gauze and tegaderm in place.</p> |
| <p><b>NEUROLOGICAL (2 points):</b><br/> <b>MAEW:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/> <b>PERLA:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/> <b>Strength Equal:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> <b>if no -</b><br/> <b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input type="checkbox"/><br/> <b>Orientation:</b><br/> <b>Mental Status:</b><br/> <b>Speech:</b><br/> <b>Sensory:</b><br/> <b>LOC:</b></p>   | <p>Patient's MAEW and PERLA is intact.<br/> Strength is equal bilaterally. AOx4<br/> Speech is clear and senses are intact.<br/> Mental status and LOC are appropriate.</p>   |

## N431 Care Plan

|   |   |
|---|---|
| <b>PSYCHOSOCIAL/CULTURAL (2 points):</b><br><b>Coping method(s):</b><br><b>Developmental level:</b><br><b>Religion &amp; what it means to pt.:</b><br><b>Personal/Family Data (Think about home environment, family structure, and available family support):</b> | Patient lives at home alone. He uses cigarettes to cope. Patient's developmental level is as expected for age. There is no religion reported and the only family mentioned are his mother, father and sister. It is unknown if they are living or deceased. |
|---|---|

**Vital Signs, 2 sets (5 points)**

| Time | Pulse  | B/P            | Resp Rate             | Temp    | Oxygen             |
|------|--------|----------------|-----------------------|---------|--------------------|
| 0700 | 76 bpm | 163/76<br>mmHg | 16 breaths/<br>minute | 37.0 °C | 98% on room<br>air |
| 1100 | 69 bpm | 124/63<br>mmHg | 18 breaths/<br>minute | 36.9 °C | 97% on room<br>air |

**Vital Sign Trends:** All of the patient's vital signs are within range except for the blood pressure.

The patient's blood pressure is elevated, but he does have a history of hypertension, so these higher values could not be out of range for him. His baseline blood pressure could be on the higher side.

**Pain Assessment, 2 sets (2 points)**

| Time | Scale | Location                          | Severity | Characteristics | Interventions             |
|------|-------|-----------------------------------|----------|-----------------|---------------------------|
| 0700 | 0-10  | Catheterization<br>insertion site | 4        | generalized     | Administered<br>Tylenol   |
| 1100 | 0-10  | Catheterization<br>insertion site | 1        | generalized     | None done at<br>this time |

**IV Assessment (2 Points)**

| <b>IV Assessment</b>   | <b>Fluid Type/Rate or Saline Lock</b>   |
|--|---|
| <b>Size of IV:</b><br><b>Location of IV:</b><br><b>Date on IV:</b><br><b>Patency of IV:</b><br><b>Signs of erythema, drainage, etc.:</b><br><b>IV dressing assessment:</b> | Two 18 gauge IV<br>Left antecubital and right antecubital<br>Left IV: Normal saline 125 mL/hr<br>Right IV: not indicated in scenario<br>Both IV's were placed on 10/11/20<br>Both IV's are patent and easily flushed<br>No signs of erythema or drainage<br>Dressing is clean, dry and intact |

**Intake and Output (2 points)**

| <b>Intake (in mL)</b>  | <b>Output (in mL)</b> |
|------------------------|-----------------------|
| 500 mL Normal Saline   | 800 mL urine          |
| 300 mL of water        | 1 incidence of stool  |
| 120 mL of Orange Juice |                       |
| Total intake: 920 mL   |                       |

**Nursing Care****Summary of Care (2 points)**

**Overview of care:** The patient had two IV's place in the left and right arm in the antecubital vein. Both of the IV's were 18 gauge. The left IV has 125mL/hr of normal saline infusing. Ensured patient safety.

**Procedures/testing done:** The patient had a chest X-ray, an EKG, and a cardiac catheterization done today.

## N431 Care Plan

**Complaints/Issues:** The patient was complaining of 4/10 pain on a scale of 0-10 at 0700 related to his cardiac catheterization insertion site, but after receiving Tylenol he rates his pain at a 1/10 in a 0-10 scale at 1100.

**Vital signs (stable/unstable):** The vital signs are stable. The blood pressure elevated which is high. The patient does have a history of hypertension.

**Tolerating diet, activity, etc.:** The patient is tolerating his diet and activity as of right now

**Physician notifications:** The physician was not notified during this shift.

**Future plans for patient:** This client will need education about the new cardiac diet, low fat, and aspirin that he has been placed on. He should also be encouraged to stop smoking.

### Discharge Planning (2 points)

**Discharge location:** The patient will be discharged to his home where he lives alone.

**Home health needs (if applicable):** There are no home health needs at this time.

**Equipment needs (if applicable):** There are no equipment needs at this time.

**Follow up plan:** The patient will follow up with Dr. Nallamothu for cardiology services within the week following his discharge.

**Education needs:** The patient will need to be educated on the importance of taking his aspirin in regards to his recent stent placement. He also needs to be educated on the cardiac diet and what type of foods are included in the diet. Smoking cessation needs to be encouraged and educated on. Discussing the patch may be an option for this patient.

### Nursing Diagnosis (15 points)

**\*Must be NANDA approved nursing diagnosis and listed in order of priority\***

| <b>Nursing Diagnosis</b><br>● Include full nursing diagnosis with | <b>Rational</b><br>● Explain why the nursing | <b>Intervention (2 per dx)</b> | <b>Evaluation</b><br>● How did the patient/family |
|---|--|--------------------------------|---|
|---|--|--------------------------------|---|

## N431 Care Plan

| “related to” and “as evidenced by” components  | diagnosis was chosen   |  | respond to the nurse’s actions?<br>● Client response, status of goals and outcomes, modifications to plan.  |
|--|--|--|---|
| <p><b>1.</b> Acute pain related to incidence of a myocardial infarction as evidenced by patient reporting substernal chest pain prior to cardiac catheterization and a rating of a 4/10 on a scale 0-10 after the cardiac catheterization.</p> | <p>This nursing diagnosis was chosen because the patient initially comes into the Emergency Department with a complaint of chest pain which is the result of a myocardial infarction. He also presents with pain related to the cardiac catheterization insertion after the procedure was completed.</p> | <p>1. Monitor and document pain that the patient reports</p> <p>2. Instruct patient to use relaxation techniques such as distraction and slow breathing.</p> | <p>Monitoring the patient’s pain was an effective intervention because by monitoring his pain level, the level decreased from a 4 to a 1. The client was happy that his pain had decreased. The patient did not respond well to the encouragement of relaxation techniques, but he responded well to Tylenol. The main goal is to control the patient’s discomfort and increase relaxation.</p> |
| <p><b>2.</b> Deficient knowledge related to the cardiac diet as evidenced by the patient never having been on a cardiac diet and not knowing exactly what the cardiac diet is.</p>   | <p>This patient has never been placed on a cardiac diet before, so he does not know anything about the diet and needs education so that he can try to stick to this diet.</p>  | <p>1. Present the teaching material in multiple ways.</p> <p>2. Reinforce the explanations of risk factors if not adhering to this diet.</p>                 | <p>Presenting the teaching materials in different ways will help the client to absorb the information in case one type of learning is better than the other. The patient appreciated the multiple ways of teaching. The patient responded well to the explanation of the risk factors but does not like the idea of being on a diet.</p>  |
| <p><b>3.</b> Decreased cardiac output related to myocardial infarction as evidenced by a</p>   | <p>This nursing diagnosis was chosen because there was a physical blockage of the right</p>  | <p><b>1.</b> Monitor cardiac enzymes</p> <p><b>2</b> Monitor BP on both arms and compare the values</p>  | <p>The patient’s cardiac enzymes were high upon admission and were not redrawn during this shift. The BP had a high systolic reading at 0700</p>  |

## N431 Care Plan

|   |  |  |  |
|---|--|--|--|
| 95% blockage on the right coronary artery which resulted in a stent placement.  | coronary artery causing a decreased cardiac output.  |  | and 1100, but the patient responded well to the monitoring of his blood pressure.  |
| 4. Risk for activity intolerance related to pain from cardiac catheterization and pain from the ST elevation myocardial infarction. | This nursing diagnosis was chosen because the client is experiencing pain related to the catheterization insertion site and the heart attack that he experienced. He also cannot move soon after the cardiac catheterization to ensure that he does not have any bleeding from the insertion site. | <p>1.limit activity based on pain and cardiac response</p> <p>2. refer to the cardiac rehabilitation program</p> | <p>The patient did not want to move initially when asked because he was in pain, after giving Tylenol his pain level decreased and he was asked to be active again. After asking he seemed unsure if he wanted to ambulate. No further action was taken during this shift. The patient was referred to the plan of cardiac rehabilitation and he seemed receptive of the goals that are given in the program.</p> <p>(Vera, 2020).</p> |

**Other References (APA):**

Vera, M. (2020). *7 Myocardial Infarction (Heart Attack) Nursing Care Plans*.

<https://nurseslabs.com/7-myocardial-infarction-heart-attack-nursing-care-plans/2/>.

**Concept Map (20 Points)**

## Subjective Data

RO came into the emergency department on 10/11/2020 with substernal chest pain and nausea that he says has been present for an hour. The patient states his pain is a 4 out of 10 at 0700 before receiving Tylenol. At 1100 he states his pain is at a 1/10. A 0-10 pain scale was used.

**Acute pain related to incidence of a myocardial infarction as evidenced by patient reporting substernal chest pain prior to cardiac catheterization and a rating of a 4/10 on a scale 0-10 after the cardiac catheterization.**

GOAL: control patients' pain and discomfort. This goal was achieved

**Deficient knowledge related to the cardiac diet as evidenced by the patient never having been on a cardiac diet and not knowing exactly what the cardiac diet is.**

GOAL: The client can determine what types of food and meals are within the parameters of the cardiac diet.

**Decreased cardiac output related to myocardial infarction as evidenced by a 95% blockage on the right coronary artery which resulted in a stent placement.**

GOAL: Decrease patient's blood pressure and cardiac enzymes. The blood pressure was decreased.

**Risk for activity intolerance related to pain from cardiac catheterization and pain from the ST elevation myocardial infarction.**

GOAL: ambulate the patient and make him comfortable with ambulation

## Nursing Diagnosis/Outcomes

## Nursing Interventions

Monitor and document pain that the patient reports  
Instruct patient to use relaxation techniques such as distraction and slow breathing.  
Present the teaching material in multiple ways.  
Reinforce the explanations of risk factors if not adhering to this diet.  
Monitor cardiac enzymes  
Monitor BP on both arms and compare the values  
limit activity based on pain and cardiac response  
refer to the cardiac rehabilitation program

## Objective Data

The patients glucose was 171, creatinine was 1.53, troponin was 0.98, and CK-MB was 42.

Patients assessment was within normal limits. Vitals were as follows: 0700: P-76, BP-163/76, R-16, T- 37.0 C, O2- 98% on room air. 1100: P-69, BP- 124/63, R-18, T-36.9 C, O2- 97% on room air. Two 18-gauge IV's were placed in the right antecubital and left antecubital vein and both have clean, dry, intact dressings and are patent.

## Patient Information

Patient with the initials RO is a 54-year-old male with a history of hypertension, hypercholesterolemia and obesity. RO had an appendectomy in 2007. He is allergic to penicillin and lives alone. He has smoked a pack a day of cigarettes for 30 years and drinks "a few beers on the weekends". He will not specify exactly how many.



