

N311 Care Plan # 3 (MI Scenario)

Lakeview College of Nursing

Ashley Holm

N311 Care Plan

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|---|----------------------------------|--|---|
| Date of Admission 12/07/xx | Patient Initials R. D. | Age: 54 DOB: 11/15/xx | Gender Male |
| Race/Ethnicity African American | Occupation ** | Marital Status Married | Allergies Penicillin, Peanuts, Sulfa, Shellfish, Contrast Dye |
| Code Status DNR-No CPR | Height 66in | Weight 242 lbs | |

Demographics (5 points)

Medical History (5 Points)

Past Medical History:

- Hypertension
- CAD w/ angina
- Asthma
- Left Ventricular Damage

Past Surgical History:

- Stent Placement (Left anterior descending coronary artery)

Family History:

- Unknown

Social History (tobacco/alcohol/drugs):

- Stopped smoking 1 month ago
- Occasionally chewing tobacco

Admission Assessment

Chief Complaint (2 points):

- Angina (Tightness of the chest)

History of present Illness (10 points):

- 54 y/o African American male is brought into ED by wife, and c/o tightness and chest pain, which is unrelieved by taking prescribed nitro (Last nitro taken at 1710), Having a Hx of CAD. Prior to this pt was shoveling snow and came inside to alert wife of chest pain w/ tightness. Vital signs are as follows: T- 99.0 F, P-104, R-26, BP- 96/56, O2%- 94% 4 L/min via Nasal Canula, pain rated- 8.

Primary Diagnosis

Primary Diagnosis on Admission (3 points):

- ST elevation Myocardial Infraction (Of Coronary Artery)

Secondary Diagnosis (if applicable):

- Allergic reaction
- Hematoma
- Development

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

Pathophysiology References (2) (APA): Myocardial Infarction of Coronary Artery, AV block, Stent

placement: Coronary artery disease (CAD) is the leading cause of death in the U.S.A, affecting more than 17 million Americans. The coronary artery supplies the myocardial muscle with O₂ and the nutrients necessary for optimal function. A myocardial Infraction is a heart attack, that happens when there is a blockage that disrupts the blood flow through the heart. Most common symptom is chest pain (angina) affecting 50% of pts. w/ this disease. Angina results form low blood flow and insufficient oxygen supply to the heart muscle. Signs and symptoms include: anxiety, hypertension, tachycardia, SOB. Risk factors include: Family Hx, increasing age, low high-density diet, diabetes, hx of smoking, obesity, male gender. Diagnostic test include: ECG, Cardiac biomarkers, Echo, chest x-ray, stress test, total lipid panel, and etc. With my patient, he was male, a previous smoker, hx of CAD, and was not eating the most healthiest diet.

Laboratory Data (20 points)

If laboratory data is unavailable, values will be assigned by the clinical instructor

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

| Lab | Normal Range | Admission Value | Today's Value | Reason for Abnormal Value |
|-------------|--------------|-----------------|---------------|---------------------------|
| RBC | 3.90-4.98 | 5.2 | | Recent procedure |
| Hgb | 12.0-15.5 | 15.9 | | Recent procedure |
| Hct | 35-45 | 54% | | Recent procedure |
| Platelets | 140-400 | 220,000 | | Recent procedure |
| WBC | 4.0-9.0 | 6,000 | | |
| Neutrophils | 40-70 | --- | | |
| Lymphocytes | 10-20 | --- | | |
| Monocytes | 5 | --- | | |
| Eosinophils | 1-4 | --- | | |
| Bands | ?? | --- | | |

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

| Lab | Normal Range | Admission Value | Today's Value | Reason for Abnormal |
|-----|--------------|-----------------|---------------|---------------------|
| Na- | 135-145 | 140 | | |
| K+ | 3.5-5.1 | 3.6 | | |

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| Cl- | 98—107 | 104 | | |
| CO2 | 22-29 | 24 | | |
| Glucose | 70-99 | 122 | | Stress, Recent procedure, Active bleeding from hematoma, NPO |
| BUN | 6-20 | 18 | | |
| Creatinine | 0.50-1.00 | 0.8 | | |
| Albumin | 3.5-5.2 | 3.6 | | |
| Calcium | 8.4-10.5 | 10.2 | | |
| Mag | 1.7-3.4 | 1.6 | | Pt. is on a NPO diet |
| Phosphate | 2.5-4.5 | 4.2 | | |
| Bilirubin | 0.0-1.2 | 0.8 | | |
| Alk Phos | ?? | 68 | | |

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

| Lab Test | Normal Range | Value on Admission | Today's Value | Reason for Abnormal |
|----------------------------|---------------------|---------------------------|----------------------|----------------------------|
| Color & Clarity | Clear yellow | Clear, yellow, aromatic | | |
| pH | 5-9 | 6.8 | | |
| Specific Gravity | 1-1.060 | 1.030 | | |
| Glucose | <20 | --- | | |
| Protein | <20 | 4 mg/dL | | |
| Ketones | <3 | --- | | |
| WBC | ?? | 2 | | |
| RBC | ?? | --- | | |
| Leukoesterase | ?? | negative | | |

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

| Test | Normal Range | Value on Admission | Today's Value | Explanation of Findings |
|----------------|--------------|--------------------|---------------|-------------------------|
| Urine Culture | Normal | Normal | Normal | |
| Blood Culture | Normal | | | |
| Sputum Culture | Normal | | | |
| Stool Culture | Normal | | | |

Lab Correlations Reference (APA):

- Nursing diagnosis list on Taylor's book 9th edition, page 369, Chapter 15 Diagnosing

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

- (12/07/xx @ 1750) **Chest X-ray:** Portable chest x-ray at the bedside demonstrates no fluid or pneumothorax. Heart is situated in the anterior chest under the sternum with no enlarged heart shadows. No rib fractures or tumors. The aorta and aortic arch have calcification and appears intact with no dilation of the artery.
- (12/07/xx @ 2000) **Percutaneous Coronary Angioplasty (PTCA) with stent placement in the left anterior descending coronary artery. No complication.**
- (12/07/xx @1745) **Cardiac Enzymes**
 - o **Creatine Kinase (CK):** 0mEq/L
 - o **Troponin T:** 0.2 ng/mL
 - o **Troponin I:** 0.06 ng/mL
 - o **Lactic Acid Venous:** 0.6 mmol/L

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- (12/07/xx @1745) Coagulation Panel
 - o **Activated Partial Thromboplastin Time (aPTT):** 34 seconds
 - o **Prothrombin Time (PT):** 12 seconds
 - o **International Normalized Ratio (INR):** 0.9

- (12/07/xx @1745) Arterial Blood Gases
 - o **pH:** 7.35
 - o **PaO₂:** 88mm Hg
 - o **PaCO₂:** 40mm Hg
 - o **HCO₃⁻:** 26mEq/L
 - o **Base Excess:** 0 mEq/L
 - o **SaO₂:** 95%

**Current Medications (10 points, 2 points per completed med)
*5 different medications must be completed***

| Brand/Generic | Morphine | Aspirin | Lisinopril | Clopidogrel (Plavix) | Diphenhydramine (Benadryl) |
|----------------------------|---|--|---|--|---|
| Dose | 2 mg | 325 mg | 10 mg | 75 mg | 25 mg |
| Frequency | PRN Q4 | Daily | Daily | daily | PRN Q4 |
| Route | IV push | PO | PO | PO | IV bolus |
| Classification | Opioid analgesic | NSAID | Antihypertensive | Platelet aggregation inhibitor | Anti-anaphylactic , Antihistamine |
| Mechanism of Action | Binds with and activates opioid receptors in brain and spinal cord to produce analgesia | Blocks the activity of cyclooxygenase the enzyme needed for prostaglandin synthesis. Prostaglandins are needed in inflammatory response, so this relieves pain | Blocks binding of angiotensin II to receptor sites in tissues. The inhibiting effects of angiotensin II lowers blood pressure | Binds to ADP receptors on the surface of activated platelets. This blocks the action of ADP which deactivates nearby glycoprotein receptors preventing | Prevents histamine from reaching site of actions, inhibiting GI, respiratory, and smooth muscle contraction |

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| | | | | fibrinogen from attaching o receptors, W/O fibrinogen platelets can't aggregate and form thrombi (clot) | |
| Reason Client Taking | Chest pain | Myocardial Infarction | Hypertension | To reduce thrombotic event (MI) | Itching or restlessness |
| Contraindications (2) | *Acute or severe asthma in unmonitored setting *Paralytic ileus | *Bleeding *Hypersensitive to NSAIDS | *Aliskiren use in diabetics *Other ACE inhibitors | *Active pathological bleeding *Intracranial hemorrhage | *Breastfeeding *Hypersensitivity to antihistamines |
| Side Effects/Adverse Reactions (2) | *Seizures *Hypotension *Shock | *Bleeding *CNS depression | *CVA *Hypotension *MI | *Bleeding *Acute liver failure *Hypotension | *Arrhythmias *Thrombocytopenia |

Medications (5 required)

Medications Reference (APA):

Jones and Bartlett Learning. 2020 Nurse's Drug Handbook. 19th ed., Jones & Bartlett Learning, 2020.

Assessment

Physical Exam (18 points)

| | |
|--|---|
| <p>GENERAL: Alertness: Orientation: Distress: Overall appearance:</p> | <ul style="list-style-type: none"> • A&O x3 • Responding to verbal commands • Respiratory distress • Clean Hygiene |
| <p>INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: .</p> <p>Braden Score: 17 No Risk Drains present: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Type:</p> | <ul style="list-style-type: none"> • Skin normal (brown) • Ashen, No edema present • Warm • Skin turgor= 2+ • During allergic reaction skin became ashy/itchy, nail beds ducky, Sweating hematoma development at groin site. Pressure applied w/ gauze at puncture site. Gauze is saturated w. bright red blood, Bleeding stopped after pressure applied. • Left stent placement in left anterior descending coronary artery; Central |

| | |
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| | <p>venous catheter; Arterial line; Indwelling catheter</p> |
| <p>HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:</p> | <ul style="list-style-type: none"> • Head/Neck symmetrical • No evident hearing loss - No hearing aids • Glasses shown in scenario (unknown vision acuity) • Nose is symmetrical, no deviation • No dentures present, no missing teeth of deformities |
| <p>CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable):</p> <p>Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:</p> | <ul style="list-style-type: none"> • Sinus rhythm w/ occasional premature ventricular contraction. • Telemetry monitoring shows RSR with PVC's • (During Allergic reaction) Tachy with PVC's. (After reaction treated) Returned to RSR with PVC's • Peripheral Pulses: Normal felt at all pulse points. • Cap refill brisk (< 3 sec); dusky nail beds • No edema |
| <p>RESPIRATORY: Accessory muscle use: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Breath Sounds: Location, character</p> | <ul style="list-style-type: none"> • Resp. labored w/ Accessory muscle used with SOB • Wheezing and intermittent stridor heard on auscultation • Allergic reaction to shellfish caused resp. distress |
| <p>GASTROINTESTINAL: Diet at home: Current Diet Height: Weight: Auscultation Bowel sounds: Last BM: Palpation: Pain, Mass etc.: Inspection: Distention: Incisions: Scars: Drains: Wounds: Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p> | <ul style="list-style-type: none"> • Regular • NPO • 5'6" • 242 lbs. • BM: Unknown • Bowel sounds present/Tympany to percussion in all x4 quadrants • Palpitation: No tenderness/masses/guarding • Drains: Indwelling catheter (placed after cath lab) |
| <p>GENITOURINARY:</p> | |

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| <p>Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Type: Size:</p> | <ul style="list-style-type: none"> • Clear/ yellow • Total out-825 • Indwelling Urinary Catheter |
| <p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: 9 Moderate (Sedative,Foley,IV) Activity/Mobility Status: BR Independent (up ad lib): (Post cath) elevate HOB 10 degrees for 2 hr and ab lib there after Needs assistance with equipment: n/a Needs support to stand and walk: n/a</p> | <ul style="list-style-type: none"> • Normal ROM in all extremities • Strength in all extremities • (After Cath Lab) HOB lay flat to keep right leg straight for 12hr until 0900 • (During resp. distress) BR ordered w/ HOB at 10 degrees. |
| <p>NEUROLOGICAL: MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input checked="" type="checkbox"/> Orientation: A&O x3 Mental Status: Mature, No confusion Speech: Clear Sensory: No Sensory Deficits LOC: Alert to time, location, and self</p> | <p>**Filled out on other side**</p> |
| <p>PSYCHOSOCIAL/CULTURAL: Coping method(s): Developmental level: Religion & what it means to pt.: Personal/Family Data (Think about home environment, family structure, and available family support):</p> | <ul style="list-style-type: none"> • Pt. and wife were educated on healthy eating habits and determined a better plan of action than the current • No coping methods evident. Pt vocalized about new symptoms which aided in early response of allergic reaction |

Vital Signs, 1 set (5 points)

| Time | Pulse | B/P | Resp Rate | Temp | Oxygen |
|------|-------|--------|-----------|-------------|------------|
| 2100 | 96bpm | 112/66 | 14 | 96.8 F oral | 98% 2L/min |

| | | | | | |
|--|--|--|--|--|---------------|
| | | | | | Nasal Cannula |
|--|--|--|--|--|---------------|

Pain Assessment, 1 set (5 points)

| Time | Scale | Location | Severity | Characteristics | Interventions |
|------|-----------------|----------|----------|--------------------|--|
| 1722 | Numeric 0-10 | Chest | 8/10 | Tightness in chest | O2 provided, Nitro, Aspirin, keeping pt. comfortable and re-assessing. |

Intake and Output (2 points)

| Intake (in mL) | Output (in mL) |
|-----------------------|-----------------------|
| NPO | Total: (12/08) 1100mL |
| Total: (12/08) 2050mL | |

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis

| Nursing Diagnosis | Rational | Intervention (2 per dx) | Evaluation |
|---|---|--|---|
| <ul style="list-style-type: none"> Include full nursing diagnosis with “related to” and “as evidenced by” components | <ul style="list-style-type: none"> Explain why the nursing diagnosis was chosen | | <ul style="list-style-type: none"> How did the patient/family respond to the nurse’s actions? Client response, status of goals and outcomes, modifications to plan. |
| <p>1. Decreased cardiac output related to MI as evidenced by Altered rhythm and chest pain</p> | <p>Pt. presented w/ chest pain which later showed through tests that the pt was having a STEMI w/ AV blockage. Which caused inadequate perfusion to the heart.</p> | <p>1. Provide O2 on the pt. and titrate for O2 to be above 95%</p> <p>2. Re-asses vitals Q 15 minutes and monitor heart rhythm and pain.</p> | <p>Intervention #1</p> <p>Goal met, O2 was administered and titrated through RN shift. w/ vitals monitored frequently. Pt. became comfortable and anxiety lowered as well as SOB.</p> |

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| | | Ensuring patient is stable | |
|---|--|--|--|
| <p>2. Impaired Gas exchange related to Anaphylactic shock as evidenced by SOB, tongue swelling, itching, dyspnea, O2 saturation dropping</p> | <p>The pt. status dropped after stating itchiness and runny nose. After, pt. airway started to close.</p> | <ol style="list-style-type: none"> 1. Provide O2 to ensure adequate gas exchange. 2. Administer medications as ordered by provider. Monitor respiratory status, Vitals, Accessory muscle, cough, breathing | <p>Goal met, O2 administered via nonrebreather at 15L/min after respiratory status declined. Medication administered and Resp., vitals, and assessment of pt. was evaluated frequently. Pt. improved and switched back to Nasal canula.</p> |

Other References (APA):

Concept Map (20 Points):

Pt. presented c/o chest pain, tightness in chest. Not relieved by Nitro or aspirin. -Dx w/ STEMI, av heart block, receives angioplasty and stent.

Pt. states, "itching and nasal congestion, SOB, tongue swelling"- allergic reaction to shellfish and contrast dye.

Pt states "I feel like I am sitting in a puddle of water"- hematoma is present,

Objective Data

Vitals:

Patient Information

54 y/o African American male comes into ED c/o tightness and chest pain, which is unrelieved by taking prescribed nitro, Having a Hx of CAD. Pt. receives angioplasty and stent, treated for anaphylaxis, hematoma, and received education on diet planning and allergies upon D/C

Nursing Diagnosis/Outcomes

1. **Decreased cardiac output related to MI as evidenced by Altered rhythm and chest pain**
 - a. Goal met, O2 was administered and titrated thought RN shift. w/ vitals monitored frequently. Pt. became comfortable and anxiety lowered as well as SOB.
2. **Impaired Gas exchange related to Anaphylactic shock as evidenced by SOB, tongue swelling, itching, dyspnea, O2 saturation dropping.**
 - a. Goal met, O2 administered via nonrebreather at 15L/min after respiratory status declined. Medication administered and Resp., vitals, and assessment of pt. was evaluated frequently. Pt. improved and switched back to Nasal canula.

Nursing Interventions

1. Provide O2 on the pt. and titrate for O2 to be above 95%
2. Re-asses vitals Q 15 minutes and monitor heart rhythm and pain. Ensuring patient is stable
3. Provide O2 to ensure adequate gas exchange.
4. Administer medications as ordered by provider. Monitor respiratory status, Vitals, Auxillary muscle, cough, breathing
5. **Education on dietary and health choices.**

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