

ATI Real Life Student Packet
N202 Advanced Concepts of Nursing
2022

Student Name: Allison Douds

ATI Scenario: 2

Medical Diagnosis: Myocardial Infarction

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

NCLEX IV (7): Reduction of Risk

Anatomy and Physiology
Normal Structures

The heart is essentially a large and very strong muscle located centrally between the lungs. The heart takes oxygenated blood from the lungs and pumps it out to the rest of the body, while simultaneously pumping deoxygenated blood back into the lungs to repeat the process about 60-100 times every minute

Left atria receives oxygenated blood from the lungs and delivers it to the left ventricle where it can be pumped out into the body

Right atria receives deoxygenated blood from body and delivers it to the right ventricle where it can be pumped into the lungs

The lungs are surrounded by a maze of vasculature that is very important in perfusing the muscle so it can pump effectively

Pathophysiology of Disease

During a myocardial infarction, the vasculature around the heart becomes occluded. This could be due to a clot or severe stenosis

The occlusion results in a lack of blood flow to the heart muscle distal to the blockage

Without blood flow, the heart muscle lacks oxygenation and begins to become necrotic

The necrotic tissue developing in the heart leads to pain and decreased ability to function

Eventually the result will be total dysfunction of the heart and impaired blood flow resulting in death

Anticipated Patient Problems, Goals, & Interventions Based on Medical Diagnosis

Problem #1: Ineffective Peripheral Tissue Perfusion

Patient Goals:

1. Skin color appropriate for ethnicity, cap refill less than 3 seconds, skin warm and dry, peripheral pulses palpable, alert and oriented x4 during care
2. O2 greater than 92%, heart rate 60-100, blood pressure less than 120/80, respiratory rate 12-20, urine output greater than 30 ml/hr throughout care

Assessments:

- BP, RR, HR, O2, UO q4hrs during care
- Skin color and temp, cap refill, peripheral pulses, mental status q6hrs during care

Interventions (In priority order):

1. Administer IV fluids and supplemental oxygen as ordered during care
2. Ensure SCDs are working and on lower extremities continuously during care
3. Administer anticoagulants and antiplatelets as ordered during care
4. Perform EKG testing as applicable during care
5. Administer thrombolytic agents as necessary during care
6. Prepare for cardiac catheterization within 90 minutes during care

Problem #2: Acute Pain; Chest

Patient Goals:

1. chest pain will be controlled at less than 5/10 with proper medication management throughout care
2. blood pressure will be less than 120/80, heart rate 60-100, respiratory rate 12-20, O2 greater than 92%, will not present with facial grimacing or guarding of the chest during care

Assessments:

- Pain level, description, quality, exacerbating and elevating factors q2hrs during care
- HR, BP, RR, O2 q4hrs during care

Interventions (In priority order):

1. Administer sublingual nitroglycerin as ordered during care
2. Administer IV morphine as ordered during care
3. Minimize unnecessary stimuli and stress at all times during care
4. Teach deep breathing techniques as indicated during care
5. Administer supplemental oxygen as ordered during care
6. Administer aspirin as ordered during care

Nursing Notes

Time	I Or E	Notes	Specify Problem #
0800	E	Arrived to the ICU post cardiac cath via the left femoral artery following a myocardial infarction due to occlusion of the left anterior descending artery, has a central line, arterial line, foley catheter, and iv fluids running, 2 liters O2 via nasal cannula-----AD	
0815	E	Chest pain has dissipated, but feels itchy over chest and arm, states "I ate shrimp one time and my tongue swelled" -----AD	
0830	I	Administered 25 mg Benadryl to counteract possible contrast dye allergy-----AD	
0835	E	Dry cough and wheezing upon auscultation of the lungs-----AD	
0845	I	Administered 15-liter O2 via nonrebreather mask-----AD	
0900	E	O2 at 87%, ashy skin, dusky nail beds, strider, obvious distress-----AD	
0905	I	Notified provider and called rapid response team, administered stress dose epinephrine-----AD	
1000	E	O2 100% via nasal cannula, consistent dry cough-----AD	
1005	I	Taught about importance of keeping pressure on surgical site when coughing to prevent bleeding-----AD	
1015	E	Signs of hematoma developing at puncture site-----AD	
1025	I	Applied pressure to site until bleeding stopped-----AD	
1030	E	Potassium 3.2-----AD	
1045	I	Administered oral potassium-----AD	
1100	I	Discussed modifiable risk factors related to cardiac health-----AD	
1200	E	Skin cool and clammy, restless and agitated, MAP 54, SBP, decreased UO-----AD	
1215	I	Initiated NS at 250 ml/hr, and a dobutamine drip-----AD	
1245	I	Initiated levophed drip at 0.5 mcg-----AD	
1400	I	Discussed lifestyle changes and included wife in conversation-----AD	
1500	I	Discussed new home medications, clopidogrel and lisinopril-----AD	
1600	E	Understood teaching and is ready for transfer to stepdown-----AD	

Initials/ Signature A.D./ A. Douds SNB

Actual Patient Problems & Goals

Problem #1: Decreased Cardiac Output

Patient Goals:

1. Blood pressure less than 120/80, urine output greater than 30 ml/hr during care (met)
2. Absence of dysrhythmias, angina and dyspnea during care (unmet)

Problem #2: Risk for bleeding

Patient Goals:

1. will not develop a hematoma at puncture site during time of care (unmet)
2. blood pressure will be less than 120/80, heart rate 60-100, will not bed extremity for the first two hours post op, will apply pressure to site when coughing or sneezing during care (met)

Problem #3: Deficient knowledge; cardiac healthy lifestyle

Patient Goals:

1. Will verbalize understanding of necessary lifestyle changes to minimize risk factors before discharge to home (met)
2. Will teach back proper dietary options at meal time during care (met)

Problem #4: Risk for ineffective peripheral tissue perfusion

Patient Goals:

1. Skin color appropriate for ethnicity, cap refill less than 3 seconds, skin warm and dry, peripheral pulses palpable, alert and oriented x4 during care (unmet)
2. O2 greater than 92%, heart rate 60-100, blood pressure less than 120/80, respiratory rate 12-20, urine output greater than 30 ml/hr throughout care (unmet)

Problem #5: Acute pain; chest

Patient Goals:

1. pain will be controlled at less than 5/10 with proper medication management throughout care (met)
2. blood pressure will be less than 120/80, heart rate 60-100, respiratory rate 12-20, O2 greater than 92%, will not present with facial grimacing or guarding of the chest during care (unmet)

Patient Resources: dietician, cardiologist, personal trainer

Patient Teaching: cardiac healthy lifestyle changes

To Be Completed After the Simulation

**The orange boxes should be filled out with your simulation patient's actual results, assessments, medications, and recommendations.

NCLEX IV (7): Reduction of Risk

Actual Labs/ Diagnostics

Troponin T 0.2-0.8
Troponin I 0.06-0.09
Lactic acid 0.6
Potassium 3.2-3.6

NCLEX II (3): Health Promotion and Maintenance

Signs and Symptoms

Chest tightness, pain, pressure
Elevated HR, BP, RR
Ashy skin

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors

Obesity
smoking
Age
Race
Gender
Diabetes
Hypertension
Coronary artery disease
Stable angina

Therapeutic Procedures

Non-surgical

Diet
Exercise

Surgical

Cardiac cath

NCLEX IV (7): Reduction of Risk

Prevention of Complications

(Any complications associated with the client's disease process? If not what are some complications you anticipate)

Heart failure
Impaired tissue perfusion

NCLEX IV (6): Pharmacological and Parenteral Therapies

Medication Management

IV fluids
Lisinopril
Aspirin
Clopidogrel
Potassium
Morphine
Oxygen
Dobutamine
norepinephrine

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures

Monitor vital signs
Minimize stimuli

NCLEX III (4): Psychosocial/Holistic Care Needs

Stressors the client experienced?

Diagnosis
Surgery
Cost
hospitalization

Client/Family Education

Document 3 teaching topics specific for this client.

- cardiac healthy diet
- management of preexisting conditions
- prevention of bleeding at surgical site

NCLEX I (1): Safe and Effective Care Environment

Multidisciplinary Team Involvement

(Which other disciplines were involved in caring for this client?)

Cardiology
Dietician
Endocrinologist
Surgical team

Reflection Paper

Directions: Write a 1-page reflection paper using Times New Roman, 12 pt. font and double-spaced. Include the following:

1. Describe an “Aha” moment you experienced during this learning experience.
2. What were the most important aspects of this simulation and what did you learn?
3. How will this simulation experience impact your nursing practice?

An Aha moment that I experienced during this real-life simulation was that even with an updated allergy list, you can never be too careful when caring for your clients. During this simulation, the client was very upfront about his allergies to penicillin, peanuts, and sulfa drugs, but didn't even think to mention the mild reaction he had to shellfish years ago. This unknown shellfish allergy was the key component required to prevent the anaphylactic reaction that he experienced post catheterization. Shellfish allergies are directly correlated to contrast dye allergies, and if the client had mentioned the reaction he experienced prior to his procedure, the anaphylactic reaction could have been prevented.

The most important aspect of this simulation experience was when the nurse noticed extremely subtle changes in the client's mentation, vitals, and coloring that lead to the early diagnosis and treatment of cardiogenic shock. It explained just how important it is to pay close attention to your clients from shift to shift. It is important as the primary nurse to know and understand possible complications of a client's disease process so you can monitor for and evaluate possible warning signs of these complications. Early identification and treatment are proven to lead to better outcomes for the client.

This simulation experience will impact my nursing practice in several ways. Most importantly, after reviewing the simulation I will better monitor for early warning signs of illness and reactions. Both anaphylaxis and cardiogenic shock could have resulted in the death of this client, but because the nurse was so cautious and observant, the client was treated early for both complications, and will likely suffer no long-term effects. I will make sure that when caring for clients I understand all possible complications they could experience and know what to assess for and when to begin early interventions if necessary.