

ATI Real Life Student Packet
N202 Advanced Concepts of Nursing
2024

Student Name: Alyssa Vitella

ATI Scenario: MI

To Be Completed Before the Simulation

Blue boxes should be completed using textbook information. What do you expect to find? This information should be collected before you start the ATI simulation

Medical Diagnosis: MI

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology

Normal Structures

Your muscular heart, the main organ in your cardiovascular system, is vital for life. Its parts work together to move blood through your body in a coordinated way. It constantly sends oxygen to your cells and takes away waste.

The heart itself is made up of 4 chambers, 2 atria and 2 ventricles. De-oxygenated blood returns to the right side of the heart via the venous circulation. It is pumped into the right ventricle and then to the lungs where carbon dioxide is released and oxygen is absorbed. The oxygenated blood then travels back to the left side of the heart into the left atria, then into the left ventricle from where it is pumped into the aorta and arterial circulation

Heart valves are like doors between your heart chambers. They open and close to allow blood to flow through. They also keep your blood from moving in the wrong direction

The heart's conduction system is like the electrical wiring of a building. It controls the rhythm and pace of your heartbeat. Signals start at the top of your heart and move down to the bottom.

NCLEX IV (7): Reduction of Risk

Pathophysiology of Disease

Myocardial infarction (MI), known as "heart attack," is caused by decreased or complete cessation of blood flow to a portion of the myocardium.

Myocardial infarction may be "silent," and go undetected, or it could be a catastrophic event leading to hemodynamic deterioration and sudden death.

Most myocardial infarctions are due to underlying coronary artery disease, the leading cause of death in the United States. With coronary artery occlusion, the myocardium is deprived of oxygen. Prolonged deprivation of oxygen supply to the myocardium can lead to myocardial cell death and necrosis.

Patients can present with chest discomfort or pressure that can radiate to the neck, jaw, shoulder, or arm.

In addition to the history and physical exam, myocardial ischemia may be associated with ECG changes and elevated biochemical markers such as cardiac troponins.

| <p align="center">Relevant Assessments</p> <p align="center">(Prewrite) What assessments pertain to your patient's problem? Include timeframes</p> | <p align="center">Multidisciplinary Team Intervention</p> <p align="center">(Prewrite) What will you do if your assessment is abnormal?</p> |
|---|--|
| Assess reports of pain PQRST q 2hr. | Administer nitroglycerin for CP as ordered q4hr PRN. |
| Assess need for pain relief q 4hr. | Administer Morphine as ordered q 4hr PRN. |
| Assess underlying cause of pain q 4hr. | Apply and maintain O2 PRN q 4hr. |
| Assess expectations of pain relief q 4hr. | Maintain and encourage bed rest to decrease myocardial O2 demand q 4hr. |
| Assess knowledge of methods to treat pain daily. | Educate on non- pharmacological ways to control pain, such as deep breathing exercises q 4hr. |
| Assess VS (BP/HR/RR) q 2hr. | Administer Beta Blockers, Metoprolol as ordered PRN q 4hr. |

Goal 2: will verbalize a pain rating of 3 or less out of 10 during the time of my care.

To Be Completed Before the Simulation

Anticipated Patient Problem: Activity Intolerance R/T SOB, CP, Fatigue

Goal 1: will have vital signs within normal limits during activity during the time of my care.

| Relevant Assessments | Multidisciplinary Team Intervention |
|---|--|
| (Prewrite) What assessments pertain to your patient's problem? Include timeframes | (Prewrite) What will you do if your assessment is abnormal? |
| Assess present level of activity and tolerance to activity q 8hr. | Encourage and educate on the importance of ambulation q 4hr. |
| Assess VS (O2/ HR/ Pain) q 4hr. | Administer appropriate pain medication as ordered q 4hr. |
| Assess potential need for assistive devices q 8hr. | Provide supplemental O2 and RW as needed q 4hr. |
| Assess for syncope while ambulating PRN q 2hr. | Provide frequent position changes and ROM exercises q 4hr. |
| Assess willingness to work with PT and OT daily. | Encourage participation with PT and OT daily. |
| Assess knowledge of recovery of MI, knowledge of activity increasing gradually. | Educate on how to increase activity gradually when discharged daily. |

Goal 2: will verbalize understanding of the need to gradually increase activity level and how to accomplish this during the time of my care.

To Be Completed During the Simulation:

Actual Patient Problem: Acute Pain

Clinical Reasoning: MI/ blockage of coronary artery blood flow.

Goal 1: will be able to perform ADLs such as brushing teeth without assistance during the time of care.
MET

Goal: will verbalize a pain rating of 3 or less out of 10 during the time of my care. MET

Actual Patient Problem: Impaired gas exchange

Clinical Reasoning: Anaphylactic rxn

Goal: will have an oxygen saturation of greater than 90% on 3L/min NC during the time of my care.
MET

Goal: will present signs and symptoms of improved ventilation such as no cough during the time of my care.
MET

Additional Patient Problems: 3) R/F Bleeding 4) Deficient knowledge

Below will be your notes, add more lines as needed. **Relevant Assessments:** Indicate pertinent assessment findings. **Multidisciplinary Team Intervention:** What interventions were done in response to your abnormal assessments? **Reassessment/Evaluation:** What was your patient's response to the intervention?

| Patient Problem | Time | Relevant Assessments | Time | Multidisciplinary Team Intervention | Time | Reassessment/Evaluation |
|-----------------|------|---|------|---|------|--|
| 1 | 0800 | Reports SOB, dizziness, and chest pain 8/10. Described as "tightness in chest"/ "I feel like my chest is being squeezed." | 0830 | Applied 12 lead ECG | 0835 | ST elevation, indicating MI causing CP |
| 1, 3 | 0900 | Returned from cardiac catheterization procedure with an incision in the femoral groin | 0930 | Educated on need to keep leg extended and straight to prevent femoral site from bleeding | 0935 | States "I no longer have chest pain" |
| 2 | 0936 | Reports "itchiness all over chest" and "allergy to fish that causes tongue to swell" States "I feel like I can't catch my breath" | 0940 | Administered 25mg diphenhydramine IV bolus, applied a non rebreathing and titrated O2 up. | 0950 | O2 100% on nonrebreather |

| | | | | | | |
|---|------|---|------|--|------|--|
| 2 | 1000 | O2 100% on non-rebreather | 1010 | Took off nonrebreather and replaced it with O2 NC | 1040 | Reports "easier breathing" |
| 3 | 1042 | Hematoma at groin insertion site. | 1045 | Applied pressure to femoral groin site | 1050 | Bleeding has stopped, hematoma area is outlined. |
| 4 | 1100 | "I eat fast food four times a week, I smoke cigarettes" | 1105 | Educated on modifiable risk factors for CAD, such as a change in diet. Adding vegetables, chicken and decreasing intake of sodium. | 1120 | Stated the understanding of modifiable risk factors for CAD |
| 2 | 1200 | Increased O2 to 3L/min NC, UO 48ml/hr | 1205 | Administered Norepinephrine | 1230 | "I am not SOB anymore I feel better" Cough is not present |
| 4 | 1300 | BP looking much better stated by RN "I feel less shaky, dizzy or tired" Wife states " we like to cook together but do not know many healthy recipes." | 1320 | Educated on healthy meals with low sodium in them. Educated on medication regimen (Clopidogrel) | 1330 | Understands the need to modify the diet, take all prescribed meds. |

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

ECG,CBG, Coag Panel, BG, CMP, ABGs,
UA, 12 lead EKG, MRI
Troponin T 0.1, Troponin I 0.06, WBC
6,000, Hbg 15.9, Hct 54%, ST elevation,
BUN 18, Creatinine 0.8, Co2 24, pH 7.35
PaO2 80 CO2 40 HCO3 26, SaO2 95%

NCLEX II (3): Health Promotion and Maintenance

Signs and Symptoms

Chest tightness "8/10"
SOB
Itchiness
Cough
Skin cold and clammy
Restlessness and agitation

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors

African American
Male
CAD with angina
HTN
Inadequate Diet
Lack of exercise
Hx. Smoking

NCLEX IV (7): Reduction of Risk

Therapeutic Procedures

Non-surgical

Admin of nitroglycerin
IVF
Foley cath

Surgical

Cardiac Cath
PCI with stent placement

Prevention of Complications

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

Necrosis of heart tissue
Arrhythmias
Ventricular septal rupture
Mitral valve regurgitation
Emboli
HF
Cardiogenic Shock

NCLEX IV (6): Pharmacological and Parenteral Therapies

Medication Management

Nitroglycerin
Aspirin
O2
Epinephrine
Diphenhydramine
Norepinephrine
Clopidogrel
Dobutamine

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures

IVF
2L/NC O2
Diet modification
Education

NCLEX III (4): Psychosocial/Holistic Care Needs

Stressors the client experienced?

Being an active husband
Pain
Anxiety
Recurrent MI

Client/Family Education

Document 3 teaching topics specific for this client.

- Gradual increase of activity
- Med management
- Pain management

NCLEX I (1): Safe and Effective Care Environment

Multidisciplinary Team Involvement

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

Cardiology
OR team
PT/OT

Patient Resources

Cardiac Rehab
Dietician

Reflection Questions

Directions: Write reflection including the following:

1. What was your biggest “take away” from participating in the care of this client?
My biggest take away from this simulation is that you cannot always trust what is in a patient’s chart. It is very important upon admission to go over basic yet vital information. Also the need to act promptly in situations such as an MI is very important for a successful outcome. The need to educate patients on their ability to decrease modifiable risk factors they have for certain diseases is also very important to prevent future incidences.
2. What was something that surprised you in the care of this patient?
Something that surprised me with the care of the client is the allergic reaction to the contrast dye that occurred. I would believe that his allergies would have been taken into consideration during the signing of consent for the cardiac cath. Otherwise I believe his symptoms from the MI and allergic reaction matched similar to textbook signs and symptoms.
3. What is something you would do differently with the care of this client?
I would have done a thorough assessment, head to toe on admission and after the cardiac cath. I would have done a more thorough assessment of the vascular system, such as check pedal pulses. I also would have went over allergies before the cath, when the consent was being obtained.
4. How will this simulation experience impact your nursing practice?
It will cause me to act promptly in situations that need to be addressed. It also showed me to always assess for allergies on admission to decrease the risk of an allergic reaction. I understand now that you cannot always trust the chart for vital information, and it is best to always confirm information with a patient first.