

ATI Real Life Student Packet
N202 Advanced Concepts of Nursing
2025

Student Name: _Destiny Klinger_

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: _Myocardial Infarction_

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology

Normal Structures

The heart is a 4 chamber hollow muscular organ (right and left atrium, right and left ventricle). The left ventricle wall is 2 to 3x thicker than the right ventricle because it has to have the strength to pump the blood into the systemic circulation. It has three layers the first being the endocardium which is a thin lining, the myocardium is a layer of muscle and lastly the outer layer the epicardium. Around the whole heart is a fibrous sac called the pericardium and it prevents friction on the heart from its surrounding structures. A major function of the heart is to pump unoxygenated blood in the heart and pump out oxygenated blood to the rest of the body. It does this by having unoxygenated blood entering the right atrium through either the inferior or superior vena cava. Once in the atrium, it goes through the tricuspid valve which is used to prevent the backflow of blood once in the right ventricle it goes through the pulmonic valve and into the lungs to become oxygenated. Comes back through the left side and through the atrium-> mitral valve -> ventricle-> aortic valve to the body. This all happens during the systole (contraction) and diastole (relaxation) phases. The heart begins to contract when the sinoatrial nodes (pacemaker) fire off, which is first signaled by an electrical impulse. Then along the heart, there are coronary arteries whose main job is to supply blood to the heart.

NCLEX IV (7): Reduction of Risk

Pathophysiology of Disease

MI occurs because of an abrupt stop of blood flow through the coronary artery with a thrombosis caused by platelet aggregation. Resulting in irreversible myocardial cell death in the heart muscle. ECG may show worsening myocardial contractility or absent myocardial contractility. The degree of LV dysfunction depends on the area and size of the infarct. Acute MI evolves over hours to a few days. Sub endocardium becomes ischemic first and if persisting it takes 4 -6 hrs for the entire thickness of the heart muscle to be necrosed.

STEMI – Results from an occlusive thrombus, resulting in ST-elevation. This is an emergency. To limit infarction size the artery must be opened within 90 min. of presentation to restore blood and O₂ to heart muscle. PCI is the gold standard treatment but hospitals that don't have PCI can give thrombolytics. If not treated promptly STEMI will evolve and cause significant damage to the heart muscle.

NSTEMI- Results from a nonocclusive thrombus, do not cause ST elevation. These pt. Do not need an emergent catheterization but undergo one within 12-72 hr.

To Be Completed Before the Simulation

Anticipated Patient Problem: Decreased Cardiac Output

Goal 1: Pt, will maintain a HR of 60-100 bpm and normal BP relative to pt. during my care time.

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 HR and rhythm, BP q4 hr, prn	Administer vasodilators to decrease the workload on the heart 2x per care day, prn
Assess respiration rate, depth, and rhythm, SPO2	Administer O2 via least invasive option first prn to maintain O2 >95
Assess for chest pain before, during, and after activities	Allow for frequent rest periods throughout the care day to decrease O2 demand
Assess Urine output q1 hr, prn	Administer isotonic IV fluid to increase available volume q8 hr., prn
Assess troponin/cardiac values at least 2x daily.	Administer prescribed medication to improve contractility such as Digitalis 1x daily.
Assess coagulation factors q8hr, prn	Administer and educate on the use of anticoagulants.

Goal 2: Pt. will have less than 3 episodes of chest pain during my care day.

To Be Completed Before the Simulation

Anticipated Patient Problem: Decreased activity tolerance

Goal 1: Pt. will demonstrate using energy conservation techniques during my time of 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 Spo2 during ambulation or activities.	Provide O2 supplements to help with increased O2 demand during activities.
Assess for any abnormal response to activity such as lightheadedness, dizziness, dyspnea, or chest discomfort during activity.	Teach energy conservation techniques at least once during care day.
Assess pt. Usual level of activity and mobility at the beginning of the care day.	Assist and provide needed aids to help complete activities during my care day.
Assess VS before activity, during, and after	Maintain telemetry monitoring
Assess attitude towards the anxiety of the work to complete ALDs or ambulate at least 1x during my care day.	Provide support and emotional support while increasing activity level.
Assess pt. knowledge of when they are beginning to overexert themselves	Educate on signs of physical overactivity before discharge

Goal 2: Pt. exhibits tolerance during physical activity by evidence of no chest discomfort or drastic increase from baseline VS during my care day.

To Be Completed During the Simulation:

Actual Patient Problem: Decrease cardiac output (D)

Clinical Reasoning: HX of CAD with angina, HTN, experienced Chest pain unrelieved by 3 doses of nitroglycerin at home

Goal: Pt. SBP will be above 90 before downgrading and discharging. Met: Unmet:

Goal: Pt. will not experience any chest pain after Stent is placed during my care days. Met: Unmet:

Actual Patient Problem: Impaired Gas Exchange (G)

Clinical Reasoning: Dizzy, during the anaphylaxis episode wheezing, turned to stridor, dusky nail beds, SPO2 of 87% on non-rebreather.

Goal: Pt. SPO2 will be above or at 95% during my care days. Met: Unmet:

Goal: Pt. will not need any invasive O2 supplementation during my care days. Met: Unmet:

Additional Patient Problems: Ineffective peripheral tissue perfusion related to bleeding (I), Deficient Knowledge (DK), risk for electrolyte imbalance (R), Acute pain (A)

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
D	Monday- 1655	Reports that his chest feels tight and the squeezing in the chest was unrelieved by sitting, grabbing the chest after shoveling snow at home	Monday	Took one oral nitroglycerin	Monday 1725	Chest pain persisting, in route to hospital via EMS
D	Monday 1725	A 54-year-old male with chest pain that started at 1655, the wife gave him 3 doses of nitroglycerin when it started and 325 mg of ASA at 1715. EKG in ENS	Monday	Admitted to hospital	Monday 0750	Complaining of chest pain, reporting that it is hard to breathe, feeling dizzy and sick to the stomach

		showed prolonged P waves, PVCs, and ST elevation				
D, G	Monday	Complaining of chest pain, reporting that it is hard to breathe, feeling dizzy and sick to the stomach	Monday	Initiates continuous telemetry monitoring, receiving oxygen via NC	Monday 1735 2100	Pt. HR at 104, O2 at 97% on 4L via NC, no signs of increased distressed HR 96, O2 98% on 2 L NC, is in normal sinus rhythm with PVCs
A	Monday	Pain is at an 8/10	Monday 1735	Educated that the EKG tech will come and perform a 12 lead to help determine if the pain is due to a heart attack 2 mg of Morphine IV administered	Monday 1730 1745	EKG showed a STEMI Pain is at an 8/10
D, DK	Monday 1730	EKG showed a STEMI	Monday	Educated on what a STEMI is and the need to go to surgery to get the artery open	Monday	States "Okay, anything to get relief from this squeezing pain"
DK	Monday	Wife questioned what happens in the catheterization procedure	Monday	Educated on the steps in the procedure and pt. state during it	Monday	Both wife and pt. Nodded head in agreement
DK, D	Monday	Preparing to go to Cath lab to open up the artery	Monday 1735	Draw state troponin, cardiac labs, lactic acid lvl, and coagulation values, and perform a chest X-ray.	Monday 1745	Troponin T 0.6ng/mL, lactic acid 0.6 mmol/L, aPTT 34 sec, PT 12 sec, INR 0.9, chest x-ray shows no fluid or pneumothorax, the aorta, and the aortic arch has calcification and appears intact with no dilation
I	Monday 2000	Had a percutaneous transluminal coronary angioplasty with stent placement in	Monday	Educated in the need to lay flat for 2 hrs with leg straight and if he needs to cough to	Monday	Reports that the chest squeezing he felt earlier is now gone, pain is at a 0/10

		the left anterior descending coronary artery, A-line placed		gently press down on the puncture site dressing.		
G	Monday	Reports feeling itchy over his arm and chest, remembers a time when he ate shrimp and his tongue swelled, and complains that it feels like he's coming down with a cold and he can't catch his breath.	Monday	Auscultated the lungs bilaterally	Monday	Wheezing heard upon auscultation
G	Monday	Wheezing was heard upon auscultation and itchy	Monday 2110	Administered 25 mg of diphenhydramine IV bolus	Monday 2120	Seems to not be able to catch his breath, and had to go to a non-rebreather at 15L due to intermittent strider, O2 at 87%, skin ashen, dusky nail beds
G	Monday 2120	Seems to not be able to catch his breath, and had to go to a non-rebreather at 15L due to intermittent strider, O2 at 87%, skin ashen, dusky nail beds	Monday	Called the provider and activated the rapid response team, administered IM epinephrine	Monday 2155	Symptoms gone, transitioned from non-rebreather to NC at 3L due to 100% O2 sat.
I	Monday 2200	The right femoral dressing was clean dry and intact previously, looks like the hematoma is developing, complains of feeling wet.	Monday 2215	Applied pressure to the right groin area for 10 minutes	Monday 2230	Wanted to know if there was anything else he needed to know and he was glad the bleeding had stopped
R	Monday 2230	Potassium is at 3.2 mEq/L	2305	20 mEq of Potassium was administered PO and educated and provided information on cardiac risk factors	Monday	Was willing to share his usual eating and exercise habits and receptive to the information provided on how to change
D	Day 2	Pt. is agitated, and	Day 2	Administered	Day 2	BP is 78/56, sinus

	1930	restless, has a BP of 88/54 with a MAP of 54, urine output is down to 48 mL/hr, and skin is cold and clammy to the touch.	1945	normal saline at 250mL/hr, and started him on a dobutamine at 16.5mL/hr, monitored tele	2010	brady Stated I need something to feel better
D	Day 2 2010	BP 78/56, sinus brady, and states he needs something to make him feel better.	Day 2 2010	Administer norepinephrine at 0.5mcg/min and titrate to maintain SBP greater than 100,	Day 2 2040	Sinus rhythm with PVCs, BP od 96/56
D, DK	Day 3 1900	No more IV medication being administered, Off oxygen, BP 124/72, O2 sat 98% on RA, in Sinus rhythm with no reported pain.	Day 3	Provide education on home meds and lifestyle changes	Day 3	Verbalized understanding by stating "I will reduce my sodium intake to 1,500 mg a day"
DK	Day 3	Was requesting more information on the home blood thinners	Day 3	Educated on clopidogrel purpose and what to look out for like unusual bruising and reason for ASA	Day 3	Discharged to the step-down unit

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
 EKG – ST elevation
 CXR- The aorta, and the aortic arch have calcification and appear intact
 Potassium – 3.2
 Troponin – 0.6ng/mL
 Lactic Acid – 0.6mmol/L

NCLEX II (3): Health Promotion and Maintenance

Signs and Symptoms
 Chest pain
 Decreased UO
 Increased HR
 Normal BP to hypotension
 Nausea

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors
 Obesity
 HTN
 CAD with angina
 Smoking that was recently stopped
 Chews tobacco

NCLEX IV (7): Reduction of Risk

Therapeutic Procedures
Non-surgical
 Chest X-ray

Surgical
 Percutaneous Transluminal Coronary Angioplasty with stent placement

Prevention of Complications
 (Any complications associated with the client's disease process? If not what are some complications you anticipate)
Normal sinus rhythm with PVCs
Cardiogenic shock
Hemorrhage from intervention needs
 Allergic reaction to dye during intervention

NCLEX IV (6): Pharmacological and Parenteral Therapies

Medication Management
 Morphine
 ASA
 Clopidogrel
 Norepinephrine
 Epinephrine
 Potassium
 Dobutamine

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures
 Continuous EKG monitor
 Rest
 Education
 Active listening to concerns and questions

NCLEX III (4): Psychosocial/Holistic Care Needs

Stressors the client experienced?
 Not having time in the week to eat homemade food instead of fast food.
 The pain and discomfort from the squeezing feeling.
 All the new meds that have to be taken at home.

Client/Family Education

Document 3 teaching topics specific for this client.
 • Education on Blood thinners
 • Lifestyle modifications
 • When to seek medical attention

NCLEX I (1): Safe and Effective Care Environment

Multidisciplinary Team Involvement
 (Which other disciplines were involved in caring for this client?)
 Nurse, cardiologist, radiologist, rapid response team, charge nurse, laboratory, pharmacy

Patient Resources

Cardiac rehab, information on places to attend disease prevention for healthy choices, support networks, outpatient cardiologists, or locations for pop. Health to receive help

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 takeaway from participating in the care of this client is how important it is to get to the Cath lab with a STEMI. This is because if they would have waited then there would have been more damage and a poorer prognosis. _
2. What was something that surprised you in the care of this patient?
_Something that surprised me in the care of the client was the sudden allergic reaction that occurred post-procedure. The reason was that the healthcare team asked about allergies but the pt. Did not connect the one shrimp reaction to an allergy himself. _
3. What is something you would do differently with the care of this client?
_Something that I would have done differently is ask specific questions about previous minor or major reactions to shellfish before the procedure. The reason is depending on the severity of the allergy they may not be able to encounter iodine that is used in the majority of procedures. By doing this it would have eliminated the potential for an anaphylaxis response. _
4. How will this simulation experience impact your nursing practice?
_This simulation experience will impact my nursing practice by stressing the importance of questioning all allergies even if they never thought about it was one. Also, if my pt. complains of feeling wet when completely continent or with a foley in place, always looks and turns over. It also impacts my nursing practice by showing how much education goes into caring for someone who is not frequently in the hospital and how explaining everything can help ease anxiety. The experience showed to keep an eye on sudden changes in the pt. status and VS to get ahead of the problem and not be in a reactive state. _