ATI Real Life Student Packet
N202 Advanced Concepts of Nursing
2026

Student Name: __Riley Osborne_____

ATI Scenario: ___MI complications_____

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

Endocardium= inner layer of the heart
Myocardium= the muscle of the heart
Epicardium= the outer layer of the heart
Pericardium= sac surrounding the heart which has 10-15 mL of fluid to prevent friction rub

Blood flow=
Superior or inferior vena cava -> RA -> tricuspid valve -> RV -> pulmonic valve -> pulmonary artery -> lungs where gas exchange occurs -> pulmonary veins -> LA -> mitral valve -> LV -> aortic valve -> aorta -> body

Left main coronary artery divides into the left anterior descending and the circumflex artery. The LAD supplies the LV, septum and the anterior wall. The LAD is known as the "widowmaker"

Right coronary artery supplies the RV, inferior wall, and the SA and AV nodes.

SA node is in the RA and is the natural pacemaker at 60-100 bpm
The AV node is the delay impulse that allows the ventricle to fill
Bundle of His
R and L bundle branches
Purkinjie fibers cause ventricular contraction

Diastole= filling phase where the ventricles relax and blood fills them
Systole= the ejection of the blood
Preload= vL of blood in the ventricle before contraction

NCLEX IV *(7)*: Reduction of Risk

Pathophysiology of Disease

Blood flow through the coronary artery becomes obstructed leading to ischemia and necrosis of the heart muscle. Most begin with atherosclerosis or plaque build up In the arteries. When a rupture occurs that is what forms the clot and clogs the artery. The ischemia is what causes chest pain from the lactic acid build up and dysrhythmias because of the electrical instability. If it lasts longer then 20 minutes it can lead to cell death. Once cell death has occurred the heart muscle losses its contractility. Cardiogenic shock can occur if not caught quick enough which comes from severe decreased CO leading to poor organ perfusion. After the MI the body will try to compensate by activating the RAAS system causing fluid retention and increased the HR.

Full occlusion is a STEMI, partial is a NSTEMI

Afterload= resistance the ventricle must pump against Contractility= strength of the contraction		

To Be Completed Before the Simulation

Anticipated Patient Problem: decreased cardiac output

Goal 1: HR will remain between 60-99 bpm during my time of care

Goal 2: urine output will be > 30 mL/hr during my time of care

Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include timeframes	**Multidisciplinary Team Intervention** (Prework) What will you do if your assessment is abnormal?
Assess HR and rhythm continuously with telemetry	Administer anti-arrhythmic medications or beta blockers as ordered and notify provider of rhythm changes PRN
Monitor urine output q 1 hr	Encourage PO fluids, educate on the importance, raise IVF rate, notify provider PRN
Assess skin color, temp, and capillary refill q 4 hrs	Raise HOB, apply oxygen PRN
Assess for s/s of HF such as JVD, crackles, edema q 4 hrs	Administer diuretic and elevate HOB PRN
Assess LOC q 2 hrs	Apply oxygen, notify provider PRN
Assess BP q 4 hrs	Administer antihypertensives, fluid bolus, or vasodilators as ordered PRN

To Be Completed Before the Simulation

Anticipated Patient Problem: Activity intolerance

Goal 1: chest pain will not exceed >5/10 during my time of care

Goal 2: Will tolerate ambulating 50 ft without signs of dyspnea during my time of care

Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include timeframes	**Multidisciplinary Team Intervention** (Prework) What will you do if your assessment is abnormal?
Assess for chest pain with activity (location, quality, and severity) q 6 hrs	Administer oxygen, morphine, nitroglycerin as ordered PRN
Assess HR and rhythm during exercise q 6 hrs	Report any arrythmias or HR increases when walking PRN
Assess knowledge of activity restrictions q shift	Verbalize and demonstrate the activity restrictions that apply once home after an MI q shift
Evaluate ability to sleep/ rest q 6 hrs	Allow uninterrupted periods of sleep, day/night cycles, and limit stimulus q shift
Assess for dyspnea, fatigue, or dizziness during activities q 4 hrs	Allow rest periods, educate on the importance of taking it slow and slowly increasing activity PRN
Monitor that HR, BP, and O2 before, during, and after activity are within parameters (60-100bpm, 120/80, >95%)q 4 hrs	Stop activity if VS fall out of parameters, provide safe place to rest and call for help PRN

To Be Completed During the Simulation:

Actual Patient Problem: **decreased cardiac output**

Clinical Reasoning: Hx of artery blockage, smoker, eats out a lot, red meat, increased sodium intake, chest
Goal: Skin will remain warm and correct color for ethnicity during my TOC
Met: Unmet:X
Goal: urine output will be > 30 mL/hr during my time of care
Met: X Unmet:☐

Actual Patient Problem: deficient knowledge

Clinical Reasoning: smoker, increased sodium intake, increased red meat intake, minimal exercise
Goal: Will verbalize understanding of risk factors of MI's during my TOC
Met: X Unmet:☐
Goal: Will understand the importance of sodium restrictions during my TOC
Met: X Unmet:☐

Additional Patient Problems: 3) risk for infection, 4) risk for bleeding

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	1720	Pt stated chest pain started around 1700 and he was outside shoveling the driveway, complains of a pain of 8/10. Wife stated husband has a history of blocked arteries and takes nitroglycerin at home	1725	ECG taken, ST segment elevation noted.	1900	No chest pain reported after opening the blockage was removed
1/ 2	1733	Doctor notes to the patient and his wife that he is experiencing a heart attack (STEMI), troponin levels are 0.2. started on 4L of oxygen	1745	Taken down to cath lab in less then 60 minutes to prevent further damage	1900	Cath was successful and stent was placed
2	1733	Wife acts for clarification on what the opening	1735	Doctor explains to the wife how the procedure will work and what they	1740	Wife verbalizes understanding of procedure

		of the coronary artery is		will do to remove the blockage		
3	1900	Central venous catheter, A-line, foley, multiple IVs after cath procedure	1930	Assured patency of lines, used sterility when needed	3rd day 2000	Lines and foleys discontinued before moving units. No s/s of infection occurred such as fever, or increase HR
2/4	1900	cath lab procedure completed, nurse orients patient to room. Pt is somewhat awake	1915	Educates on keeping leg straight, keeping HOB flat for now, and holding pressure to groin sight when coughing	1920	Pt verbalized understanding and put pressure on groin site to demonstrate understanding
2	2000	Pt stated chest and arms feel itchy	2010	Diphahydromine 25mg iv bolus offered for itching	2010	Complained of feeling cold like symptoms with a cough
2	2020	Questioned pt on any allergies that need to be made aware of, stated shellfish	2200	Verbalized the importance of telling medical staff all allergies not just medication allergies to prevent scenarios as such	2220	verbalized understanding of the importance
1/2	2030	Auscultated lung sounds, noted dyspnea, ashen skin, stridor, nail beds dusky. On 2L NC. Rapid response team noted an allergic reaction. SpO2 87%	2035	15 L/min by non-rebreather face mask applied. Administered epinephrine 0.3mg IM	2100	Pt stated feeling much better but continuing to have a cough. 3L NC applied
3/4	2200	Hematoma noted at groin site	2220	Pressure placed on site, educated on the importance of marking around the hematoma on the dressing as well as there may be a bruise after	2225	Verbalized understanding and acknowledged that the bleeding has stopped at the sight
1	2245	Potassium results came back low	2250	Provider 20 mEq ordered oral potassium to take	3rd day 0600	Potassium level 3.4 prior to leaving the unit

2	2300	Has many modifiable risk factors and a pamphlet at bedside of what can be modified	2305	Inquired about exercising daily, diet such as eating at home and less red meat, and encouraged to continue on the path of not smoking	2310	Verbalized understanding and admitted how it is hard to change so many factors of your life
1	2320	Skin feels cold and clammy, arterial pressure and BP dropped, restless and agitated. UO down to 49 mL/hr	2330	IV 0.9 NS at 250mL/ hr for 2 hrs Dobutamine 250 mg, 2.5 mcg/kg/miL drip ordered	2345	Did not improve BP and pt still symptomatic while at bedside
1	2350	Pt drowsy, SOB, BP remains low despite fluid bolus and dobutamine	0000	IV norepinephrine started 0.5 mcg/min then titrate to keep systolic BP >100	0010	BP stabilizes, pt stated he is no longer dizzy or shaky and feels much better
2	2nd day 1900	Assessed readiness to partake in education at bedside with wife. Encouraged to look at labels of foods to watch sodium and had pt and wife pick out what they thought was best for breakfast the next day	1915	After picking their breakfast they went over the amount of sodium in each food. Nurse went over how the options they picked took up half of the allotted amount of sodium a day that the pt can have	1920	Wife verbalized understanding and they went over other alternatives to have with less sodium
2	2nd day 1945	Pt asked about new anti plt medication lisinopril	1950	Educated on the importance to reduce clots as well as to report any signs of bleeding such as red urine, bruising, etc	2000	Wife verbalized the importance of the medication and what signs need to be reported back to the doctor

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 levels
CBC
CRP
BMP
BNP
Lipid
PT/INR
ECG
Cardiac cath
Echo
CXR

NCLEX II *(3)*: Health Promotion and Maintenance

Signs and Symptoms

Chest pain
SOB
N/V
Diaphoresis
Fatigue
Anxiety
Impending doom

NCLEX II *(3)*: Health Promotion and Maintenance

Contributing Risk Factors
Age
Obesity
Smoking
Diet
Genetics
Stress
Exercise

NCLEX IV *(7)*: Reduction of Risk

Therapeutic Procedures
Non-surgical
Oxygen
MONA
aspirin

Surgical
CABG
ICD
Temporary pacemaker

Prevention of Complications
(Any complications associated with the client's disease process? If not what are some complications you anticipate)
Death
Heart failure
Systemic HF s/s

NCLEX IV *(6)*: Pharmacological and Parenteral Therapies

Medication Management

O2, aspirin, antiplt therapy, ACE inhibitors, beta blockers, anticoagulants, morphine, nitroglycerine

NCLEX IV *(5)*: Basic Care and Comfort

Non-Pharmacologic Care Measures
Bed rest, positioning, teley monitoring, cardiac rehab, VS

NCLEX III *(4)*: Psychosocial/Holistic Care Needs

Stressors the client experienced?

Emotional, fear of unknown, fear of being alone next time, stressing about every chest pain being a heart attack, what limitations this will put on the future

Client/Family Education

Document 3 teaching topics specific for this client.
- modifiable risk factors and how to change them
- when to call 911 next time
- what can cause another attack and how to prevent them

NCLEX I *(1)*: Safe and Effective Care Environment

Multidisciplinary Team Involvement
(Which other disciplines were involved in caring for this client?)
Cardiologist, clergy, nurse, doctors, cath lab, psychiatrist, hospitalist

Patient Resources

Cardiac rehab, pamphlets, home health, community help, snow moving companies, assistance at home

Reflection Questions

Directions: Write reflection including the following:

1. What was your biggest "take away" from participating in the care of this client?
   I think the biggest take away that I had is I always had an idea of what a patient with a heart attack would look like coming in and the fact that this patient looked almost normal besides the pain was shocking.

2. What was something that surprised you in the care of this patient?
   It surprised me how much education had to be done by the nurses and the staffing for both the patient and the wife considering the wife had mentioned that he had blockages in the past.

3. What is something you would do differently with the care of this client?
   Maybe call a rapid response sooner, the itching is typically a clear sign of an allergic reaction and so the epinephrine feels more important than the medication to help with the itching sensation.

4. How will this simulation experience impact your nursing practice?
   It will help me to understand that just because a patient and family may have gone through something similar in the past it does not mean that they are guaranteed to be knowledgeable and educated on what is going on.