

Due Thurs  
by 11:59  
PM

## Active Learning Template MI Activity

Client Scenario: Mr. Potato Head, age 76, presents to the local emergency department complaining of shortness of breath, chest pain that radiates to the jaw, nausea, and an excruciating headache. Upon assessment, the nurse notes the client to be diaphoretic, tachycardic, and tachypnic with noted hypertension. The client states to the nurse "I feel like I am going to die. I just know I'm going to die today."

### Client's Past Medical History:

- Hypertension
- Rheumatoid Arthritis
- Anemia
- UTIs

### Client's Home Medications:

- Lisinopril 40 mg PO BID
- Hydroxychloroquine 200 mg PO daily
- Ferrous sulfate 325 PO TID
- Acetaminophen 650 mg PO q6h PRN for pain/fever
- Lorazepam 1 mg PO daily at HS

### Vital Signs are as follows:

Temperature: 37.4C  
BP: 178/86  
HR: 118 bpm  
RR: 22  
O2: 96% on room air

### Physician Orders:

1. 12-lead EKG
2. Chest XR
3. Cardiac enzymes (troponins, CKMB, myoglobin)
4. Other labs: CBC, BMP, lipid panel
5. Nitroglycerin 0.4 mg SL q5m PRN x3 doses
6. Supplemental oxygen 2L/min for O2 saturation under 92%
7. Sodium chloride 0.9% at 75 mL/hr
8. Vital signs q1h until stable, then q2h

ACTIVE LEARNING TEMPLATE: **Diagnostic Procedure**

STUDENT NAME Destiny Bell ♡  
PROCEDURE NAME Electrocardiogram (ECG/EKG)

REVIEW MODULE CHAPTER \_\_\_\_\_

**Description of Procedure**  
an electrocardiogram measures the electrical signals in the heart to assess for various cardiac diseases

**Indications**

- arrhythmias
- previous MI
- coronary artery disease
- Family history of heart diseases

**CONSIDERATIONS**

Nursing Interventions (pre, intra, post)

Pre- assist the patient into a hospital gown & tell them where the electrodes will go

intra: attach electrodes as indicated

Post: remove electrodes and help the patient get back into their clothes

**Interpretation of Findings**  
Detects arrhythmias such as tachycardia and bradycardia.

**Client Education**  
Tell the patient to tell the provider if they have recently taken any drugs or supplements as they can impact the patients cardiac rhythm.

**Potential Complications**  
if the patient is moving it can result in an abnormal ekg

**Nursing Interventions**

- Instruct patient to remain still at all times during the procedure.
- The adherence of the electrodes some men may have to have an area of the chest shaved for the electrodes to stick

ACTIVE LEARNING TEMPLATE: **Diagnostic Procedure**

STUDENT NAME Destiny Bell

PROCEDURE NAME Chest X-Ray (CXR)

REVIEW MODULE CHAPTER \_\_\_\_\_

Description of Procedure

Visualizes the lungs, hearts, bones and even blood vessels by using electromagnetic waves.

Indications

- To see if there is fluid on the lungs
- Assess if heart is enlarged
- ~~check~~ If patient has congenital heart disease.

CONSIDERATIONS

Nursing Interventions (pre, intra, post)

Pre: remove jewelry, wear hospital gown

Intra: cooperate and remain still during the imaging

Post: assist patient back in bed comfortable, possible meds if any pain

Interpretation of Findings

Calcium in the heart or blood vessels can be found via the chest xray. Its presence could indicate lipids, in which his LDL and total cholesterol are elevated as well as his triglycerides

Client Education

move as little as possible.

if pain worsens and you need help notify ~~staff~~ the x-ray tech and a nurse

Potential Complications

Radiation poisoning

- hair loss
- loss of skin and hair
- fainting
- bleeding

Nursing Interventions

effective hand hygiene

suitable apparel

provide patient education

track your health

ACTIVE LEARNING TEMPLATE: **Nursing Skill**

STUDENT NAME Destiny

SKILL NAME Intravenous (IV) Line Insertion

REVIEW MODULE CHAPTER \_\_\_\_\_

Description of Skill

The process of beginning intravenous therapy to deliver medications or blood to the patient

Indications

If the patient is going to require a substantial infusions of medications, fluids, electrolytes and nutrition.

CONSIDERATIONS

Nursing Interventions (pre, intra, post)

Pre: appropriate supplies  
correct catheter size

Intra: apply tourniquet, clean insertion site, insert catheter and stabilize, and document the IV site

Post: maintaining IV access patency and discontinuing IV treatment

Outcomes/Evaluation

IV treatment is put into the veins enabling the catheter to administer any medication or fluid that the doctor deems as necessary.

Client Education

Inform about the procedure and the type of medicine or fluids they'll be getting through the IV line.

Potential Complications

- Fluid overload
- cellulitis
- Infiltration
- extravasation
- phlebitis
- thrombophlebitis
- catheter embolism

Nursing Interventions

change IV every 72 hours or sooner depending on the hospital's regulations.  
Use aseptic approach

# System Disorder

STUDENT NAME Destiny Bell  
 DISORDER/DISEASE PROCESS Myocardial Infarction (MI)

REVIEW MODULE CHAPTER \_\_\_\_\_

Alterations in Health (Diagnosis)

Acute MI

Pathophysiology Related to Client Problem

Tissue death caused by a blockage in the coronary vessel results in a prolonged shortage of oxygen to the myocardial tissues.

Health Promotion and Disease Prevention

exercise - the heart 30 minutes daily  
 decrease cholesterol  
 no smoking

ASSESSMENT

Risk Factors

- smoking
- diabetes
- old age
- high blood pressure
- genetics
- high cholesterol
- obesity

Expected Findings

jugular vein distention  
 shortness of breath  
 tachycardia, tachypnea  
 angina, ST-segment elevation  
 ST-segment depression

SAFETY CONSIDERATIONS

Know signs and symptoms & who to call

Laboratory Tests

Troponin-I, BNP, CK/CK-MB  
 myoglobin

Diagnostic Procedures

EKG/ECG, blood tests  
 electrocardiogram, angiogram and cardiac enzymes

PATIENT-CENTERED CARE

Nursing Care

pain meds, maintain/increase oxygenation, early detection, health planning and anxiety management

Therapeutic Procedures

Supplemental O<sub>2</sub>  
 coronary stent  
 bypass surgery

Medications

Anticoagulants, thrombolytics, nitrates, beta-blockers, diuretic, calcium channel blockers, ACE inhibitors, statins, and pain meds

Client Education

healthy diet  
 home care adherence  
 early warning signs

Interprofessional Care

cardiology nurse  
 primary care & dietician

Complications

cardiogenic shock or heart failure

# Therapeutic Procedure

STUDENT NAME

Destiny Bell

PROCEDURE NAME

Cardiac Catheterization

REVIEW MODULE CHAPTER

## Description of Procedure

method of identifying and treating particular cardiovascular issues. They use an artery or vein to insert a long thin catheter, which is then sent through the blood vessel to the heart

## Indications

Coronary artery disease  
 evaluate ventricular function  
 evaluate & treat cardiac arrhythmias  
 evaluate and treat valvular heart disease

## CONSIDERATIONS

### Nursing Interventions (pre, intra, post)

Pre: advise patient they can't eat or drink before the procedure.

Intra: possible awake during the procedure, conscious sedation

Post: recovery is quick & little movement

## Outcomes/Evaluation

Coronary angiogram: arterial blockage  
 right heart cath: measures blood flow and pressure  
 heart biopsy:

## Client Education

Let the patient know they may be awake during the procedure, low chance of any problems and recovery is usually quick

## Potential Complications

bleeding  
 bruising  
 stroke  
 MI  
 Damage to the artery  
 irregular heart rhythm  
 kidney damage

## Nursing Interventions

Deep breath & hold  
 Try to remain still

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Destiny Bell ♡

MEDICATION Nitroglycerin

REVIEW MODULE CHAPTER \_\_\_\_\_

CATEGORY CLASS Nitrate vasodilator

**PURPOSE OF MEDICATION**

Expected Pharmacological Action

relaxes blood vessels & increases blood and oxygen supply to the heart while reducing its work load.

Therapeutic Use

Treat or prevent chest pain

Complications

nausea vomiting  
diaphoresis pallor  
fainting

Medication Administration

~~1~~ dose every 5 minutes as needed for a total of 3 doses (sublingual)

Contraindications/Precautions

Known history of Right sided MI,  
increased intracranial pressure  
Severe anemia

Nursing Interventions

Encourage patient not to swallow or chew the tablet, how to properly store, and when to seek help

Interactions

interacts with aspirin, heparin  
benadryl, Norco, Xanax  
hypotension  
anemia  
pericarditis

Client Education

seek emergency help if chest pain is still present after using the 3 doses in 15 minutes

Evaluation of Medication Effectiveness

The pain is relieved after 3 doses = medicine is effective

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Destiny Bell ♥

MEDICATION Morphine Sulfate

REVIEW MODULE CHAPTER

CATEGORY CLASS Opioid, Opioid analgesic, II, category c

**PURPOSE OF MEDICATION**

**Expected Pharmacological Action**  
Binds with and activates opioid receptors in the brain and spinal cord to produce analgesia and euphoria.

**Therapeutic Use**  
To relieve pain

**Complications**  
hallucinations increased heart rate  
n/v/d Fever confusion  
weakness agitation

**Medication Administration**  
admin 1mg intravenously every 2 hours as needed for chest pain.

**Contraindications/Precautions**  
• Acute or severe bronchial asthma  
• seizure disorders  
• acute alcoholism

**Nursing Interventions**  
monitor BP, respiratory rate and pain level

**Interactions** verampil lorazepam  
alcohol, Xanax  
Other opioids, benzodiazepines or barbiturates Liver Disease

**Client Education**  
may cause dizziness and fainting when you get up too quickly  
may cause constipation

**Evaluation of Medication Effectiveness**  
pain is relieved or lowered