Amanda Toole
3/30/20202

Acute Coronary Syndrome (ACS) Myocardial Infarction (MI)

JoAnn Smith, 68 years old

Primary Concept
Perfusion
Interrelated Concepts (In order of emphasis)
1. Fluid and Electrolyte Balance 2. Clinical Judgment 3. Communication 4. Collaboration

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Acute Coronary Syndrome/Acute MI

History of Present Problem:

JoAnn Smith is a 68-year-old woman who presents to the emergency department (ED) after having three days of progressive weakness. She denies chest pain but admits to shortness of breath (SOB) that increases with activity. She also has epigastric pain with nausea that has been intermittent for 20-30 minutes over the last three days. She reports that her epigastric pain has gotten worse and is now radiating into her neck. Her husband called 9-1-1 and she was transported to the hospital by emergency medical services (EMS).

Personal/Social History:

JoAnn is a recently retired math teacher who continues to substitute teach part-time. She is physically active and lives independently with her spouse in her own home. She has smoked 1 pack per day the past 40 years. JoAnn appears anxious and immediately asks repeatedly for her husband upon arrival.

What data from the histories are RELEVANT and have clinical significance to the nurse?

RELEVANT Data from Present Problem:	**Clinical Significance:**
o Pt age 68 o Progressive weakness times 3 day o Pt states SOB with increased activity o Pt has epigastric pain with nausea, that progressively worsened that radiates to her neck over 3 days	o A nonmodifiable risk factor for CAD is increasing age. o Weakness can be caused by decrease in C0. Remember that although weakness is a generalized complaint, it is clinically significant because it is not uncommon for women to have atypical signs and symptoms with ACS. BSc o SOB can be due to decrease perfusion to the heart and fluid overload. o Cardiac pain is pain that usually radiates to neck, arm and shoulder blades also can nausea.
RELEVANT Data from Social History:	**Clinical Significance:**
o Pt lives at home with husband. o Smokes 1 pack a day for the last 40 yrs. o Pt appears anxious	o Patient can take care of herself o Smoking is the #1 risk factor for Heart disease/CAD What does it do to an individual's body that causes heart disease? BSc o Anxiety can worsen the development of CAD What does anxiety do to the workload of the heart? BSc

What is the RELATIONSHIP of your patient's past medical history (PMH) and current meds?

(Which medications treat which conditions? Draw lines to connect)

PMH:	**Home Meds:**	**Pharm. Classification:**	**Expected Outcome:**
1. Diabetes mellitus type II 2. Hypertension 3. Hyperlipidemia 4. Cerebral vascular accident (CVA) with no residual deficits 5. Gastro-esophageal reflux disease (GERD) 6. Anemia-Iron deficiency	6. Iron Sulfate 325 mg PO daily 2. Lisinopril 5 mg PO daily 3. Simvastatin 20 mg PO daily 4. Aspirin 81 mg PO daily 4. Clopidogrel 75 mg PO daily 5. Omeprazole 20 mg PO daily 1. Metformin 500 mg PO bid	o Iron Supplement o Ace Inhibitor o Statin o Salicylate o Antiplatelet o Proton Pump Inhibitor o Biguanides (antidiabetic)	o resolve & prevent iron-deficiency anemia o Decreases BP o lowering of total and LDL cholesterol & triglycerides o produces analgesia affect, reduces inflammation, & decreases platelet

			aggregation o prevents platelet aggregation to reduce risk of MI/stroke o diminished accumulation of acid in the gastric lumen with decreasing GERD o maintenance of blood glucose

Excellent job identifying the relationship between your patient's past medical history and her current medications. You also did a great job identifying the correct pharmacological classification and expected outcomes. BSc

One disease process often influences the development of other illnesses. Based on your knowledge of pathophysiology (if applicable), which disease likely developed FIRST that created a "domino effect" in her life?

 Circle what PMH problem likely started **FIRST**: **Hyperlipidemia**

 Underline what PMH problem(s) **FOLLOWED** as domino(s): **type II Diabetes ,HTN, CVA**

Thinking about what you know about DM Type-2 and its pathophysiology, would you change your answer for this question at all? Remember, long term complications of DM includes disease of the large and small blood vessels in the body which leads to CAD, PVD, and HTN. Therefore, the patient's diagnosis of DM Type-2 likely started the domino effect. However, hypertension and hyperlipidemia are close seconds that worked together to cause the vascular complications that JoAnn also has experienced. BSc

Patient Care Begins:

Current VS:	**P-Q-R-S-T Pain Assessment (5th VS):**	
T: 99.2 F/37.3 C (oral)	**P**rovoking/Palliative:	Nothing/Nothing
P: 128 **(**regular)	**Q**uality:	Ache
R: 24 (regular)	**R**egion/Radiation:	Left arm that radiates into neck
BP: 108/58	**S**everity:	5/10
O2 sat: 99% room air	**T**iming:	Intermittent-20-30" at a time

What VS data are RELEVANT and must be recognized as clinically significant by the nurse?

RELEVANT VS Data:	**Clinical Significance:**
• HR 128 elevated • BP 108/58 • RR 24 • 5/10 intermittent ache that radiates to the left arm into neck	• Patient is anxious/stressed • May be lowered due to decrease in cardiac output • Patient has SOB, Pain and anxious could increase RR • Sudden, radiating pain into left side can be indicative of an MI

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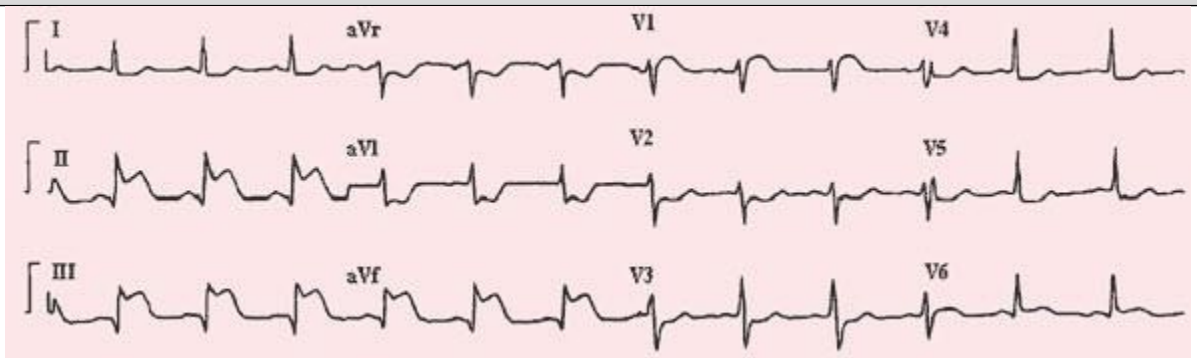
Current Assessment:	
GENERAL APPEARANCE:	Anxious, appears uncomfortable, body tense
RESP:	Respirations labored, coarse crackles present in bases bilaterally anterior/posterior
CARDIAC:	Pale, diaphoretic, no edema, heart sounds regular S1S2 with no abnormal beats, pulses strong, equal with palpation at radial/pedal/post-tibial landmarks
NEURO:	Alert & oriented to person, place, time, and situation (x4)
GI:	Abdomen soft/non-tender, bowel sounds audible per auscultation in all 4 quadrants
GU:	Voiding without difficulty, urine clear/yellow
SKIN:	Skin integrity intact, skin turgor elastic, no tenting present

What assessment data is RELEVANT and must be recognized as clinically significant by the nurse?

RELEVANT Assessment Data:	**Clinical Significance:**
• Anxious, body tension and appears to be uncomfortable • Labored Respirations, coarse crackles bilaterally at the bases posterior and anterior • Pale and diaphoretic	• Patient is clearly anxious, anxiety increase O2 demand which decreases perfusion to tissues and results increase workload of the heart. • Labored breathing with crackles related to collection fluid in lung bases. • It is common for a patient to become pale and diaphoretic in the initial phase of an MI What causes this to occur? What is going on in the body? BSc

12 Lead EKG:



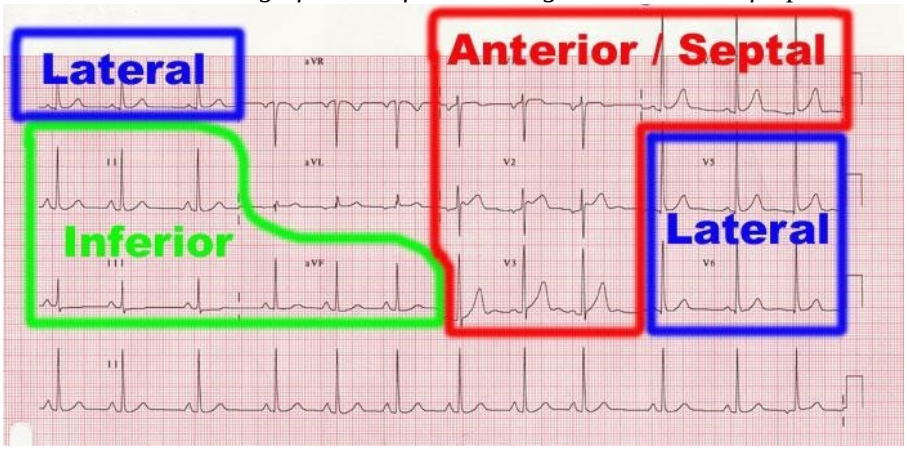
Interpretation:

STEMI in leads 2, 3 & AVF which indictive of an inferior of a MI. Excellent job! BSc
Clinical Significance:
The patient is presenting with an MI. Prepare for an emergency Percutaneous coronary intervention. Remember, this is clinically indicative of an inferior wall infarction which occurs with occlusion of the right coronary artery. What is the significance of the RCA being blocked? BSc

Location of ST Segment Changes (lateral/anterior/inferior)**: Inferior**

Use the diagram below to identify the location of the infarction:

Though this content on basic 12-lead EKG interpretation may be above the scope of knowledge required for most programs, take advantage of the APPLICATION of the principle that ***ischemia causes distinct EKG changes****. This is relevant when a patient on routine cardiac telemetry monitoring begins to have NEW ST-T wave changes. If the nurse understands the significance of these changes, a RESCUE of a patient with a change of status can begin!*



Radiology Report: Chest x-ray

What diagnostic results are RELEVANT and must be recognized as clinically significant to the nurse?

RELEVANT Results:	Clinical Significance:
Scattered bilateral opacities consistent with atelectasis or pulmonary edema	Back up of fluid due to the coronary blockage, causes edema. The patient should be given O2 as needed while awaiting further measures such as thrombolytics, PCI, etc.

Radiology Report: Echocardiogram

What diagnostic results are RELEVANT and must be recognized as clinically significant to the nurse?

RELEVANT Results:	Clinical Significance:
Global left ventricle hypokinesis with ejection fraction of 25%	The EF can be related to left heart failure, secondary to a MI. What is a normal EF? BSc

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Lab Results:

Complete Blood Count (CBC):	Current:	High/Low/WNL?
WBC (4.5-11.0 mm 3)	10.5	WNL
Hgb (12-16 g/dL)	12.9	WNL
Platelets(150-450x 103/µl)	225	WNL
Neutrophil % (42-72)	70	WNL

What lab results are RELEVANT and must be recognized as clinically significant by the nurse?

RELEVANT Lab(s):	Clinical Significance:
• Hgb • Platelets	• Could be leaning towards the lower side due to the patient's anemia. I plan to continue monitoring Hgb levels since this reflects the patient's oxygen carrying capacity • Though the patient's platelets are WNL, it is important to keep an eye on this lab value due to the pt's history of CVA and currently having a MI. Although all the patient's labs are within normal limits here, how are they clinically significant for a patient who is having an MI? In other words, why would we be concerned about these labs? What could they tell us? BSc

Basic Metabolic Panel (BMP):	Current:	High/Low/WNL?
Sodium (135-145 mEq/L)	135	WNL
Potassium (3.5-5.0 mEq/L)	4.1	WNL
Glucose (70-110 mg/dL)	184	HIGH
Creatinine (0.6-1.2 mg/dL)	1.5	HIGH
Misc. Labs:		
Magnesium (1.6-2.0 mEq/L)	1.8	WNL

RELEVANT Lab(s):	Clinical Significance:
• Potassium • Glucose • Creatinine	• Though the patients K+ is WNL, potassium should be monitored continuously to prevent any other cardiac issues. • The patient's glucose is elevated, I would ask the patient if she is taking the metformin. How it is prescribed. Uncontrolled diabetes put the pt more at risk for cardiac complications. • Kidney function impaired related to health history of DM, HTN and recent MI. Would you consider the patient's sodium and magnesium levels to be relevant data as well? Although they are within normal limits, how are they important for a cardiac patient? BSc

What lab results are RELEVANT and must be recognized as clinically significant by the nurse?

Cardiac Labs:	Current:	High/Low/WNL?
Troponin (<0.4 ng/mL)	1.8	HIGH

BNP (B-natriuretic Peptide) (<100 ng/L)	1150	HIGH

What lab results are RELEVANT and must be recognized as clinically significant by the nurse?

RELEVANT Lab(s):	Clinical Significance:
• Troponin • BNP	• When myocardial cells become damaged troponin is released. It's important to know elevated troponin is a specific indicator of MI • Elevated BNP shows stress to ventricles due to increase workload of the heart.

Lab Planning: Creating a Plan of Care with a PRIORITY Lab:

Lab:	Normal Value:	Clinical Significance:	Nursing Assessments/Interventions Required:
Troponin **Value:** **1.8** ng/mL	**Critical Value: (greater) >0.4**	When myocardial cells become damaged troponin is released. It's important to know elevated troponin is a specific indicator of MI.	• Notify HCP immediately • continuous ECG monitoring • Continuous VS • Obtain IV access • Treat chest pain PRN • Administer oxygen as needed to keep oxygen saturation > 92% • Assess respiratory status such as lung sounds, RR, SPO_2. • Strict I's and O's • Administer drugs (thrombolytics, nitroglycerin, antiplatelets, etc.) per HCP order

Clinical Reasoning Begins…

1. ***What is the primary problem that your patient is most likely presenting with?***
   The primary problem is that the patient is presenting with is a STEMI as evidenced by radiating epigastric pain, elevated troponin value of 1.8, SOB which increases with activity, anxiety, ST elevated leads II, III and AVFSTEMI displayed on the patients' ECG.

2. ***What is the underlying cause/pathophysiology of this primary problem?***
   The underlying cause of the patient's primary issues, a STEMI could be caused by a multitude of things. The pathophysiology could be due to the patient's past medical history. Patient is currently smoking and has been smoking 1 pack a day for the past 40 years. Smoking is the #1 risk factor for heart disease. The patient also has HLD. This could possibly be due to high salt intake and poor diet. The patient smoking history and HDL could have contributed in the patients HTN, DM, CVA, and MI. The patient also has an extremely elevated BNP. The patients high BNP which indicates stress on the ventricles, dyspnea on excretion, and audible crackles, it is evident that the patient has HF. Heart failure increase patients' risk for a MI.

Great job identifying underlying causes! What is the pathophysiology of an MI? BSc

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Collaborative Care: Medical Management

Care Provider Orders:	Rationale:	Expected Outcome:
Establish 2 large bore peripheral IVs	Provides access to rapidly administer vital and critical medications to the patient	The patient is able to receive proper medications, for better overall prognosis
Metoprolol 5 mg IV push x1 now	"Decreases mortality in patients with recent MI"	Reduction in frequency of anginal attacks to increase activity tolerance & prevent MI
Nitroglycerin IV drip-start at 10 mcg and titrate to keep SBP >100	Patient experiencing 5/10 chest pain radiating to arms and neck	Vessels will dilate allowing more blood flow to the heart reducing chest pain
Clopidogrel 600 mg po x1 now	Blood thinner to inhibits platelet aggregation and decreases the risk clot formation	Decreases risk for another MI or stroke
Aspirin 324 mg (81 mg tabs x4) chew x1 now	Decreases analgesia. Blood thinner to inhibit platelet aggregation and clot formation	Decreases risk for another MI or stroke
Heparin 60 units/kg IV x1 now	Blood thinner to inhibit platelet aggregation and clot formation	Decreases risk for another MI or stroke
To Cath lab as soon as team ready	Patients with STEMI require immediate Percutaneous Coronary Intervention.	Blockage will be located through a cardiac catheterization and stents will be placed to open the arteries accordingly. Patient will display adequate blood flow

PRIORITY Setting: Which Orders Do You Implement First and Why?

Care Provider Orders:	Order of Priority:	Rationale:
1.Establish 2 peripheral IVs 2.Metoprolol 5 mg IV push x1 now 3. Nitroglycerin IV drip-start at 10 mcg and titrate to keep SBP >100 4. Clopidogrel 600 mg PO x1 now 5. Aspirin 324 mg (81 mg tabs x4) chew/PO x1 now 6. Heparin 60 units/kg IV x1 now 7. To cath lab as soon as	1. Establish 2 peripheral IVs 2. Nitroglycerin IV drip-start at 10 mcg and titrate to keep SBP >100 3. Metoprolol 5 mg IV push x1 now 4. Heparin 60 units/kg IV x1 now 5. To Cath lab as soon as team ready 6. Aspirin 324 mg (81 mg tabs x4) chew/PO x1 now	1. IV access is vital in emergent situations so that important medications can be administered as soon as possible. 2. Nitroglycerin should be administered next because it acts as a vasodilator. This helps to open up the arteries and get blood flow to the heart. 3. Metoprolol helps manage BP, HR, and angina. It is important to administer this med to reduce the risk for mortality. 4.Heparin is a blood thinner that can be used as a prophylaxis to prevent thrombus formation.

team ready	7. Clopidogrel 600 mg PO x1 now	5. Transporting the patient to Cath lab is critical to open the blocked artery within 90 mins. 6. Aspirin also decreases platelet aggregation 7. Clopidogrel decreases platelet aggregation For your order of priority, you would want to administer the aspirin first and then you would want to administer the clopidogrel because we have to think of circulation as a priority. Your next intervention would be to establish the 2 peripheral IVs. You would then want to give the metoprolol next because we want to decrease the workload of the heart. The nitroglycerin would then follow this intervention. Heparin would be administered next to prevent extension of the thrombus, and then getting the patient to cath lab. Cath lab is a top priority, however, we do have to think about the fact that it typically takes the team 30-45 minutes to assemble and get ready. BSc

Medication Dosage Calculation:

Medication/Dose:	Mechanism of Action:	Volume/time frame to Safely Administer:	Nursing Assessment/Considerations:
Metoprolol 5 mg IV push (5 mg/5 mL vial)	Blocks stimulation of $beta_1$-adrenergic receptors to decrease BP, HR, frequency of angina, and rate of cardiovascular mortality.	Missing a response here. **IV Push:** 5 mL over 1 minute BSc **Volume every 15 sec?** 1 mL every 15 seconds will push this in slightly over 1 minute. BSc	• Monitor BP, HR, and ECG frequently • Monitor VS Q5-15 min (if HR < 40 bpm, administer atropine) • Strict I's and O's and daily weights • Assess routinely for s/s of HF • Assess for angina periodically • Monitor BUN and K+

Medication/Dose:	Mechanism of Action:	Volume/time frame to Safely Administer:	Nursing Assessment/Considerations:
Heparin 60 units/ kg Weight: 62 kg (1000 units/mL)	Potentiates the inhibitory effect of antithrombin on factor Xa and thrombin. This prevents thrombus formation or progression of existing thrombi.	Missing a response here. **IV Push:** 3720 Units (3.72 mL) BSc **Volume every 15 sec?** (62 kg X 60 units/kg = 3270 units. 3270 units/1,000 units/mL = 3.72 mL 3.72 mL/4 (1/4 minute is equal to 15 seconds) = 0.93 mL Keep it simple and administer 1 mL of Heparin every 15 seconds. BSc	• Administer over at least 1 min • Assess for signs of bleeding; notify HCP if s/s occur • Monitor platelet count Q2-3 days (may cause mild thrombocytopenia) • Protamine sulfate is the antidote for toxicity and OD

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Collaborative Care: Nursing

3. What nursing priority(ies) will guide your plan of care? *(if more than one-list in order of PRIORITY)*

Priority is to establish 2 peripheral IV's, this is to ensure the proper medications gets infused, such as Heparin, Metoprolol and Nitro. These will prepare patient for Cath lab. What nursing diagnoses would be your priority? BSc

4. What interventions will you initiate based on this priority?

Nursing Interventions:	Rationale:	Expected Outcome:
1. Establish 2 peripheral IVs 2. Nitroglycerin IV drip-start at 10 mcg and titrate to keep SBP >100 3. Metoprolol 5 mg IV push x1 now 4. Heparin 60 units/kg IV x1 now 5. To cath lab as soon as team ready What about vital signs, focused cardiovascular assessment, EKG monitoring? BSc	1. IV access is vital in emergent situations so that important medications can be administered as soon as possible. 2. Nitroglycerin should be administered next because it acts as a vasodilator. This helps to open up the arteries and get blood flow to the heart. 3. Metoprolol helps manage BP, HR, and angina. It is important to administer this med to reduce the risk for mortality. 4.Heparin is a blood thinner that can be used as a prophylaxis to prevent thrombus formation. 5. Transporting the patient to Cath lab is critical to open the blocked artery within 90 mins.	1. Pt will be able to receive IV medications properly and in a timely manner. 2. Nirtro will open up blood flow to the heart 3. Metoprolol reduces risk for mortality by decrease BP, HR. 4. Heparin pt will not have thrombus 5. Pt is transported in timely manner and the artery is open with in 90 mins.

5. What body system(s) will you most thoroughly assess based on the primary/priority concern?

Respiratory System, Cardiovascular System

6. What is the worst possible/most likely complication to anticipate?

Sudden Cardiac Death

Great job! What are some possible arrhythmias the patient could be at risk for that could cause this complication? BSc

7. What nursing assessments will identify this complication EARLY if it develops?

Patient reports angina, dyspnea and palpitations. Death usually occurs with 1 hr of the onset of acute symptoms in hose who have experienced a MI.

8. What nursing interventions will you initiate if this complication develops?

Continuous monitoring of Vital Signs, ECG, administer oxygen as needed to keep SPO_2 > 92%, Obtain IV access, administer thrombolytics, nitroglycerin, and anticoagulants, prep patient for emergency Percutaneous coronary intervention. What do we do for someone who goes into cardiac arrest? CPR? Call a code blue? BSc

9. ***What psychosocial needs will this patient and/or family likely have that will need to be addressed?***

The patient and family will likely be scared, stressed and anxious. It's important to keep the patient and family informed as to what's going on. This important for them to understand the overall care of patient. Teaching the patient about deep breathing techniques can help relieve the stress and anxiety.

10. ***How can the nurse address these psychosocial needs?***

It will be important for the nurse to explain every intervention being completed and the expected outcome for the patient to reduce anxiety. The nurse can also make sure to ask the patient and family if they have any questions and provide answers to the best of her ability.

Evaluation: Two Days Later…

JoAnn had an angiogram that revealed an occluded proximal right coronary artery (RCA). She received two bare metal stents with 0 percent residual stenosis. She has been in the intensive care unit (ICU) the past two days and is now transferring to the cardiac telemetry floor. She has been receiving scheduled furosemide 40 IV mg every 12 hours. Her creatinine increased from 1.7 to 2.1 today. The last dose of furosemide was given four hours ago. She has had 100 mL urine output the past four hours. She fatigues easily, but tolerates being up in the chair for short periods of time. Faint basilar crackles persist bilaterally and her O2 is at 2 liters per n/c.

What data from this history are RELEVANT and must be recognized as clinically significant to the nurse?

RELEVANT Data from History:	**Clinical Significance:**
1. Pt had 2 stents placed with angiogram 2. Pt now taking furosemide 3. Creatinine is increasing 4. Low urine output 5. Fatigues easily 6. Basilar crackles 7. 2 L O_2 NC	1. Monitor site for complications 2. Monitor fluids and electrolytes for imbalance 3. Kidney function may be impaired 4. Low urine output will cause elevated creatinine which will cause impaired kidney function 5. Do not let the patient ambulate alone to reduce falls 6. Crackles reflect the patient's fluid overload/ HF 7. Struggles to breathe on room air

Current VS:	**Most Recent:**	**P-Q-R-S-T Pain Scale:**	
T: 97.2 F/36.2 C (oral)	**T:** 97.5 F/36.4 C (oral)	**P**rovoking/Palliative:	
P: 76 **(**regular/irregular)	**P:** 82 **(**regular)	**Q**uality:	Denies pain
R: 20 (regular)	**R:** 20 (regular)	**R**egion/Radiation:	
BP: 122/58	**BP:** 116/68	**S**everity:	
O2 sat: 95% room air	**O2 sat:** 94% room air	**T**iming:	

Current Assessment:	
GENERAL APPEARANCE:	Resting comfortably, appears in no acute distress
RESP:	Denies SOB, non-labored respiratory effort, breath sounds equal aeration bilaterally with faint crackles in both bases

CARDIAC:	Pink, warm & dry, 1+ pitting edema in lower extremities, heart sounds regular–S1S2, pulses strong, equal with palpation at radial/pedal/post-tibial landmarks
NEURO:	Alert & oriented to person, place, time, and situation (x4)
GI:	Abdomen soft/non-tender, bowel sounds audible per auscultation in all 4 quadrants
GU:	50 mL urine output since furosemide IV administered two hours ago, urine clear/yellow
SKIN:	Skin integrity intact, femoral puncture site soft, non-tender with no drainage, redness, or bruising

1. ***What clinical data are RELEVANT and must be recognized as clinically significant?***

RELEVANT VS Data:	**Clinical Significance:**
• HR 76 regular/irregular	• The workload of the heart is increased due to excess fluid.
RELEVANT Assessment Data:	**Clinical Significance:**
• Bilateral faint crackles • 1+ pitting edema • 50mL UOP in 2 hrs	• Patient is accumulating fluid in the bases of lungs • Patient is accumulating fluid in the lower extremities • Impaired kidney function

2. ***Has the status improved or not as expected to this point?***

The patient's status has improved. Patient VS are stable, denies pain, and is resting comfortably no longer feeling anxious. Crackles and edema due to her heart failure.

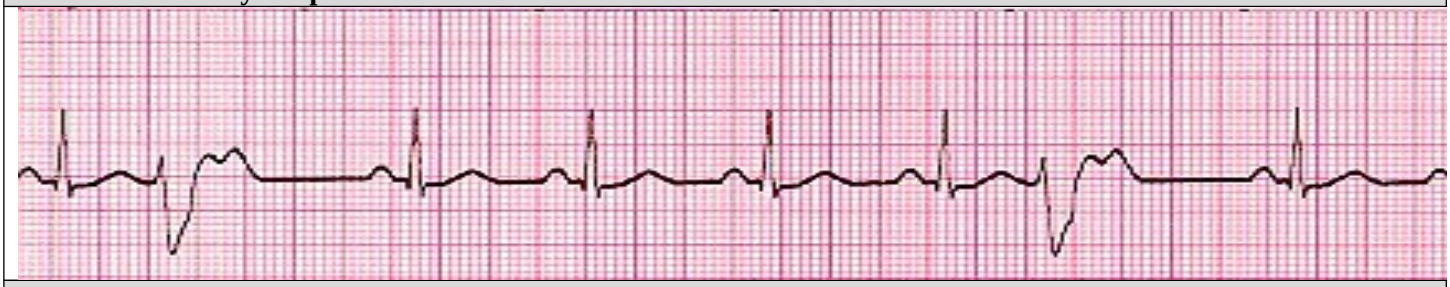
Does the patient have a history of heart failure? Or is this a new diagnosis due to suffering an MI? Therefore, has her status improved as expected? Look at your data above. BSc

3. ***Does your nursing priority or plan of care need to be modified in any way after this evaluation assessment?***

Yes. The priority is no longer oriented around her recent MI. Main focused now is her kidney function as evidenced by low UOP and elevated creatinine, related to patient's heart failure.

Great job! BSc

Cardiac Telemetry Strip:



Interpretation:

1st degree Heart Block (The patient has NSR with frequent PVCs) BSc

Clinical Significance:
1st degree heart block possible due patient recent MI. No immediate interventions required. Continue to monitor. What is the clinical significance of PVCs? BSc

Two hours later…

JoAnn is resting quietly in bed. Foley catheter assessment reveals no new urine in bag from previous assessment two hours ago. Bladder scan reveals no residual urine. Review of labs reveal increased creatinine. The primary nurse gives the following SBAR to the on-call cardiologist:

Situation:
Name/age: JoAnn Smith, Age 68 Female **BRIEF summary of primary problem: Patient has no urinary output over the last 2 hrs. Bladder scan was performed and showed no residual urine, and her creatinine level is increasing.** **Day of admission/post-op #: The patient was admitted with an STEMI. She had an angiogram with 2 stents placed two days ago.**
Background:
Primary problem/diagnosis: Recent STEMI (What else is happening now? BSc) **RELEVANT past medical history: HF, HTN, HLD, type 2 DM, current smoker**
Assessment:
Vital signs: Temp 97.2 (oral) **Pulse 76 (REGULAR/ IRREGULAR)** **RR 20** **BP 122/58** **SPO_2 95% on RA** **RELEVANT body system nursing assessment data: No UOP in the last 2 hrs, bilateral faint crackles in lung bases, 1+ pitting edema** **TREND of any abnormal clinical data (stable-increasing/decreasing): creatinine level increasing** **INTERPRETATION of current clinical status (stable/unstable/worsening): the patient appears to be stable.** Is she stable? Is her kidney function stable? BSc
Recommendation:
Suggestions to advance plan of care: Strict I's & O's, monitor electrolytes, change form of diuretic. What about a BMP? BSc

The physician addresses your concern and orders a repeat basic metabolic panel (BMP and repeat x1 furosemide (Lasix) 40mg IV push. You obtain the following results one hour later:

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Basic Metabolic Panel (BMP):	Current:	High/Low/WNL?	Most Recent:
Sodium (135-145 mEq/L)	135	WNL	132
Potassium (3.5-5.0 mEq/L)	5.9	HIGH	4.1
Glucose (70-110 mg/dL)	152	HIGH	184
Creatinine (0.6-1.2 mg/dL)	2.9	HIGH	2.1

RELEVANT Lab(s):	Clinical Significance:	TREND: Improve/Worsening/Stable:
Potassium 5.9 Creatinine 2.9	High potassium levels can cause deadly dysrhythmias Creatinine reflects function of the kidneys	K+ worsening Creatinine worsening

Current Assessment:	
GU:	One hour post furosemide administration IV, continues to have no urine output.

1. ***Has the status improved or not as expected to this point?***
   Not as expected

2. ***Does your nursing priority or plan of care need to be modified in any way after this evaluation assessment?***
   No, because kidney function and urine output is still the priority

3. ***Based on your current evaluation, what are your nursing priorities and plan of care?***
   Based on my current evaluation, I need to focus on the patient's GU system/kidney function. If the patient is not excreting urine, her potassium levels and creatinine levels will continue to increase. Negatively affecting the patient. Need to contact HCP is urine output does not start in increase soon. Excellent! BSc

Caring and the "Art" of Nursing

1. ***What is the patient likely experiencing/feeling right now in this situation?***
   The patient is most likely scared, anxious and worried. Just when she thought she was recovering from her heart attack, she now has to worry about her kidney functioning properly.

2. ***What can you do to engage yourself with this patient's experience and show that she matters to you as a person?***
   It is important to reassure the patient during this difficult time, without giving false hope to the patient considering that heart failure is a progressive disease. Providing the patient with education on her condition and ways to cope with her lifestyle can show her that you care and want what is best for her.

Use Reflection to THINK Like a Nurse

Reflection-IN-action (Tanner, 2006) is the nurse's ability to accurately interpret the patient's response to an intervention in the moment as the events are unfolding to make a correct clinical judgment.

1. ***What did I learn from this scenario?***
   I learned that it is always important to correlate the patient's health history, home medications, and physicians' orders to the patient's primary problem. It is very important that you continually monitor the patient because the patient's general appearance could mask critical lab values or vital signs.

2. ***How can I use what has been learned from this scenario to improve patient care in the future?***
   I will always remember this information throughout my nursing career to better improve my patient care in the future. I will always make sure I look at both my patient, and the charts so this will help me guide my care. I will also trend data, so I know what is normal VS not-normal to the patient. I will keep in mind to always seek clarification from another nurse or physician if I feel unsure of myself.

Amanda,

You did an excellent job with this unfolding case study. Please take the time to revisit the areas in which I identified there may have been some missing information, or more information that could be added after further deliberation and deeper thinking. This will greatly benefit you and your care in the clinical setting in the future. Additionally, please incorporate my feedback in order to improve in following virtual clinical experiences. If you have any questions about the content or need further clarification, please do not hesitate to reach out to me. Keep up all your hard work! BSc