

## Adult/Geriatric Critical Thinking Worksheet

**Student Name:** Adelita Reyna

**Unit:** South 7

**Pt. Initials:** D.K

**Date:** 12/14/2021

### 1. Disease Process & Brief Pathophysiology

Heart failure (HF) is a heterogeneous clinical syndrome which may be characterized by a variety of phenotypic changes, many of which have been linked to abnormalities in the intracellular calcium(Ca<sup>2+</sup>) signal. These range from mechanical dysfunction, usually characterized by reduced systolic contractile function, to electrophysiological dysfunction including QT interval prolongation, an increased incidence of ventricular premature beats (VPBs) and arrhythmic sudden cardiac death (SCD). In ventricular myocardial cells, intracellular Ca<sup>2+</sup> ion fluxes govern the translation of the depolarizing signal into mechanical contraction, a process termed excitation-contraction (E-C) coupling. Abnormalities of intracellular Ca<sup>2+</sup> handling are thought to underlie both mechanical and electrophysiological dysfunction in failing myocardium. This chapter summarizes the events involved in normal E-C coupling and describes the changes observed in HF, with particular focus on the changes reported in remodelled ventricular myocardium. Changes in intracellular Ca<sup>2+</sup> signalling in other cardiac cell types, such as atrial cardiomyocytes and Purkinje fibre cells, may also be crucial to the final HF phenotype, but less is known about pathological changes in these tissues, and therefore these will only be mentioned briefly.

### 4. Diagnostic Tests pertinent or confirming of diagnosis

### 2. Factors for the Development of the Disease/Acute Illness

Valvular disease (P)  
Prolonged bed rest (P)  
Injury  
Surgery Increasing age (P)  
NSAID inhibitor use  
Being overweight or obese (P)  
Smoking (P)  
Hyperlipidemia  
COPD  
Diabetes Mellitus  
Hypertension (P)  
Genetics  
CAD  
CVA  
Recent infections

### 5. Lab Values that may be affected

Xray (P)

### 3. Signs and Symptoms

Sudden shortness of breath (P)  
Chest pain or discomfort that worsens when you take a deep breath or when you cough (P)  
Feeling lightheaded or dizzy or fainting (P)  
Rapid breathing (P)  
persistent cough  
Weakness (P)  
Pain in chest (P)  
Cramping or soreness  
anxiety  
restlessness (P)  
"air hunger"

### 6. Current Treatment

Drug therapy- Elaquis, etc and Cardiac

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Chest Radiography (P)

CT scan (P)

Catheterization intervention.

LVEF- Left ventricle ejection fraction

Cardiac Catheterization (P)

Health promotion/education

Venography

Sudden shortness of breath (P)

Hypertension management

CT scan (P)

Chest pain or discomfort that worsens when you take a deep breath or when you cough (P)

Cardiac Diet

Cardiac Catheterization (P)

Physical activity with PT/OT

Xray- (P)

Rapid breathing (P)

PFT (P)

Dyspnea (P)

cardiac Panel

Palpitations (P)

Cardiac Enzymes

CMP (P)

#### **7. Focused Nursing Diagnosis:**

Activity Intolerance

#### **11. Nursing Interventions related to the Nursing Diagnosis in #7:**

1 .assist the patient with ambulation as tolerated to improve blood flow and speed up wound healing and aid in preventing constipation while on pain management.

#### **12. Patient Teaching:**

1. Teach the client to use guided imagery or discretion methods to help ease their mind when experiencing shortness of breath and calm breathing technique.

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**8. Related to (r/t):**

Related to imbalance between Oxygen supply and demand. increased heart rate and decreased oxygen saturation

**Evidenced Based Practice:**

2. Helping the patient elevate the lower extremities when in bed to help promote good quality blood circulation to prevent DVT.

2. Teach patient the importance of physical activity as tolerated.

3. Teach the client to be proactive and notify the registered nurse that they are experiencing signs and symptoms of dyspnea. Ask for help prior to getting up from the bed.

**9. As evidenced by (aeb):**

Patient verbalized he feels short of breath after walking to and from the bed to go to the restroom. Sits in the recliner due to feeling weak, and slight lightheaded.

**Evidenced Based Practice:**

3. Adjust the patient's daily activities and encourage patient to have adequate bed rest and sleep..

**13. Discharge Planning/Community Resources:**

1. Case manager to see if the patient needs or qualifies for physical therapy to maintain independence and promote healing post-op.

2. Need for equipment at home- oxygen therapy, walker.

**Evidenced Based Practice:**

3. Case manager to provide resources for cardiac diet maintenance after being discharged.

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**10. Desired patient outcome:**

Patient will be able to identify, verbalize, and demonstrate behaviors that will reduce anxiety when experiencing shortness of breath by Wednesday at 1400, 12/15/2021.