

# Adult/Geriatric Critical Thinking Worksheet

**Student Name:** Ashlee Guzman

**Unit:** South 9

**Pt. Initials:** W.H

**Date:** 3/30/2021

## 1. Disease Process & Brief Pathophysiology

Congestive heart failure is a physiologic state in which the heart can not pump enough blood to meet metabolic needs. This results in the inability of the heart to provide sufficient blood to meet the O<sub>2</sub> needs of tissues and organs. The primary myocardial response to chronically increased wall stress is myocyte hypertrophy, death due to apoptosis, and regeneration. This then leads to fibrosis to the ventricular myocardium. Decreased carotid baroreceptor stimulation and renal perfusion will activate the sympathetic nervous system & renin angiotension receptor. SNS activation will cause increased HR & inotropy, leading to myocardial toxicity. Renin-angiotensio-aldosterone system activation leads to vasoconstriction, increasing after load (water & sodium retention). This process eventually leads to remodeling & reduced cardiac output. In other words, the heart is unstable to keep up with the blood demand for the body due to vasoconstriction thus leading to poor blood supply & heart failure. Heart failure can be caused by diseases of the myocardium, endocardium, pericardium, vessels, and metabolic disorders.

## 4. Diagnostic Tests pertinent or confirming of diagnosis

History and physical (P)

Chest X-Ray (P)

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

Hypertension (P)

CAD (P)

Myocarditis

Rheumatic heart disease

Diabetes

Alcohol use (P)

Sleep apnea

Irregular heart beats

Obesity

Tobacco use (P)

Viruses

Hyperthyroidism

## 5. Lab Values that may be affected

Cardiac troponin (P)

CBC (P)

## 3. Signs and Symptoms

Fatigue / weakness (P)

Dyspnea (P)

Edema (P)

Tachycardia

Skin changes (P)

Behavioral changes (P)

Chest pain (P)

Weight changes

Dry hacking cough (P)

Dizziness

Nausea

Frothy pink sputum

Anxiety / Depression (P)

SOB (P)

## 6. Current Treatment

Drug Therapy: beta blocker (P), anticoagulants (P), ACE inhibitors, Angiotension II receptor, vasodilators, and digoxin

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Stress test

BUN (P)

Home health (P)

12- lead ECG

Lactic acid

Daily weights

Cardiac catheterization

Creatinine

Diuretics

CT scan

CMP

Coronary bypass surgery

Myocardial biopsy

BNP (P)

Heart transplant

Echocardiogram (P)

MRI

**7. Focused Nursing Diagnosis:**

impaired gas exchange

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

1 .Encourage patient to move in frequent position changes.

**12. Patient Teaching:**

1. Teach patient to use incentive spirometer to help them breathe more deeply and fully.

2. Teach patient to cough up any sputum to aid in clearance of airways.

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

Alveolar edema due to elevated ventricular pressures, impaired ventilation, and collapse of the alveoli.

**Evidenced Based Practice:**

Frequent position changes helps prevent atelectasis and pneumonia.

3. Educate my patient about the importance of preventing pneumonia and getting the vaccine.

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

Patient states he is SOB and coughing.

2. Assist patient into high fowler's position.

**Evidenced Based Practice:**

This position decreases work of breathing, reduces cardiac workload, and promotes gas exchange.

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

1. Let patient know about the possible need for O2 equipment at home.

2. Discuss the need for adequate rest to decrease

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dyspnea.

**3.** Administer supplemental oxygen to my patient as indicated.

**3.** Discuss implications of smoking related to

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**10. Desired patient outcome:**

impaired gas exchange.

Patient will be able to demonstrate adequate ventilation and oxygenation of tissues within patient's normal ranges and free of symptoms of respiratory distress. This will be accomplished so that our patient is able to breath better. This is achievable since I will help my patient get his treatments. The benefit of accomplishing our goal is to help our patient feel much better. This goal is to be accomplished by March 31st, 2021 @ 2 p.m.

CITATION SOURCES:

Adapted by August 2016 G. B., Flynn, M. M., Martinez-

