

Adult/Geriatric Critical Thinking Worksheet

Student Name: ArianTagle

Unit: S10

Pt. Initials: J.G

Date: 12/15/2021

1. Disease Process & Brief Pathophysiology

ARDS occurs when the pulmonary or systemic inflammation leads to release of cytokines and other proinflammatory molecules that activate alveolar macrophages and recruit neutrophils to the lungs. Furthermore, this releases leukotrienes, oxidants, platelet-activating factor, and proteases. These substances damage capillary endothelium and alveolar epithelium, disrupting the barriers between capillaries and airspaces. Edema fluid, protein, and cellular debris flood the airspaces and interstitium, causing disruption of surfactant, pulmonary hypertension ventilation-perfusion mismatch, shunting, and an airspace collapse which occurs in the dependent lung zones. Later stages involve proliferation of the alveolar epithelium and fibrosis. ARDS usually occurs when an overproduction of fluid builds up in the alveoli causes a blockage of air to fill the lungs, which results in a depleted oxygen to flow through the blood stream.

4. Diagnostic Tests pertinent or confirming of diagnosis

1. Chest X-ray (P)
2. CT Scan (P)
3. Echocardiogram
4. Electrocardiogram

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

1. Sepsis (P)
2. Pneumonia (P)
3. Inhalation of harmful substances
4. Head, chest or other major injuries
5. COVID-19 (P)
6. Pancreatitis
7. Massive blood transfusions
8. Burns

5. Lab Values that may be affected

1. ABG (P)
2. CBC (P)
3. BMP (P)
4. Hepatic
5. Coagulant PT/PTT

3. Signs and Symptoms

1. Severe SOB (P)
2. Labored and unusually rapid breathing (P)
3. Low BP (P)
4. Confusion
5. Extreme tiredness

6. Current Treatment

1. Oxygen supplement (P)
 2. Mechanical ventilation (P)
 3. Increase fluids (P)
- MEDS FOR:
1. Prevent/treat infections (P)

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6. D-Dimer

7. Troponin

8. Lactate (P)

2. Relieve pain and discomfort (P)

3. Prevent blood clots (P)

4. Minimize gastric reflux (P)

5. Sedate

7. Focused Nursing Diagnosis:

Impaired gas exchange

8. Related to (r/t):

Hypoxia

9. As evidenced by (aeb):

Pt. stated upon admission that she was SOB and her O2 sat was 89% on RA. Pt. has changing between high flow and NC throughout her stay.

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

1 . Instruct pt. to assess the home environment for irritants that can worsen gas exchange and adjust the home environment to fit comfort

Evidenced Based Practice:

Irritants in the environment decreases the pt's effectiveness in accessing oxygen during breathing.

2. Sleep or sit in semi-fowlers

Evidenced Based Practice:

Semi-fowlers position allows an increased thoracic

12. Patient Teaching:

1. Ambulate as much as possible to help oxygen flow

2. Use IS every 2 hours

3. Lay in a prone position when using high flow

13. Discharge Planning/Community Resources:

1. Instruct pt. to break up ADLs to help conserve oxygen

2. Instruct pt. to continue to increase fluids (warm if possible) to help break down mucus

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capacity, total descent of the diaphragm and increased lung expansion.

3. Use a humidifier to help ease symptoms

10. Desired patient outcome:

For the pt. to show a clear understanding of how to use the IS and TCDB every 2 hours effectively by noon on 12/15/2021.

3. Routine position checks to ensure pt. is not slump down.

Evidenced Based Practice:

Slumped positioning causes the abdomen to compress the diaphragm and limits full lung expansion.