Case Study: Mrs. J.

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**Question 1**

Mrs. J is a 63 years old patient. Her height is 1.75 meters and a weight 95.5kg. This indicates that a patient is obese as body mass index determined from these conditions is 31.2. Mrs. J is presented with a history of COPD (chronic obstructive pulmonary disease), chronic heart failure, high blood pressure, and smoking. She is suffering from a high fever. She had complained about nausea, malaise, and a productive cough. In the last few days, she was not even able to perform ADLs and she needed someone to help her in walking. She has also a feeling of restlessness, that is why she kept asking that she is going to die. Mrs. J felt that she was unable to get enough air. This complaint indicates that she had asthma. She used to get tired easily. She had also a complaint of weakness, fatigue, and swelling in feet, legs, and ankles.

**Question 2**

At the time of admission, several nursing interventions were carried out. After admitting in the Intensive Care Unit, the patient was supposed to be put on the oxygen. At the time of admission, it was more appropriate if the patient was assessed properly as it is the first step to determine what actual problem is and how it can be cured. Before intervention and planning care for a patient with heart failure, nurses need to conduct a systematic assessment that consists of the identification of the actual cause of heart failure i.e. risk factors, aggravating factors and current clinical status. The most important things that should be taken care of are effective care, patient education, and appropriate planning.

**Rationale**

Furosemide: The intravenous administration of furosemide is administered when rapid diuresis onset is required. For example, in pulmonary edema (Pani et al., 2015).

Enalapril: Enalapril is an ACE inhibitor that is very effective in lowering blood pressure. Enalapril is very effective in heart failure patients.

Metoprolol**:** Metoprolol is used to treat high blood pressure and is effective in preventing kidney problems, strokes and heart attacks. This is also helpful to improve survival after a heart attack.

IV Morphine sulfate: IV morphine sulfate is an opioid that is used to treat pain.

An inhaled short-acting bronchodilator: This is used to treat the asthma symptoms by opening the airways.

Inhaled corticosteroid: It is effective in the treatment of asthma symptoms

**Question 3**

The four most common conditions that can lead to heart failure are smoking, high blood pressure, COPD and obesity (Ahmed et al., 2015).

Smoking: Nursing intervention to manage this is to educate the patient on the risk factors associated with smoking and on the smoking cessation importance. Respiratory therapy, nicotine patches, and other prescribed medication regimen are also an effective nursing intervention in reducing heart failure associated with smoking.

High blood pressure: Uncontrolled blood pressure is also a major risk factor for developing chronic heart failure (Siu, 2015). A nursing intervention to manage this includes the development of effective guidelines on the management of high BP. Monitor the blood pressure of the patient regularly. Patient counseling should be done regarding the risk factors associated with high blood pressure.

COPD: Another condition that can lead to heart failure is COPD. Nursing intervention for COPD patients includes symptoms management, maximizing function and counseling to enhance self-care.

Chronic heart failure and Obesity

Chronic heart failure and obesity are also common causes of heart failure. Nursing intervention includes reducing fatigue and promoting activity to relieve fluid overload symptoms.

**Question 4**

Keeping the dosing schedule as simple as possible, limiting the number of a medication change, reviewing dosages and patient education are some effective nursing interventions that can be used to reduce the multiple drug interactions in an older patient.

**Question 5**

Nursing care plan for this patient include the following points

* Check the patient's lab data (blood count, cardiac markers, etc.) to determine contributing factors.
* Record and monitor blood pressure in both arms
* Auscultation of heart rhythm and breath sounds
* Observe the patient's temperature and skin color
* Advise the patient on reducing salt intake
* Administer medication on time
* Patient education on smoking cessation
* Reviewing the medicine dosage
* Determine the specifics of the pain. For example, pain intensity, duration and where it is located.
* Encourage rest during episodes of severe pain
* Helps the patient to adopt necessary lifestyle changes

**Question 6**

The method that can be used to provide education regarding medicines to Mrs. J. to prevent future hospital admission includes

* Finding out what she already knows and educate her regarding complications associated with a missed dose
* Helping her to create a schedule for taking medications.
* Feed her information in layman's terms.

**Question 7**

The COPD triggers that can increase exacerbation frequency include air pollution (Oliveira et al., 2016). Smoke can damage the air sacs in the lungs which can lead to coughing, wheezing and shortness of breath. As there is no cure for COPD, smoking cessation can help exacerbate the symptoms. Proper counseling should be done regarding the advantages of smoking cessation. In the case of Mrs. J, behavioral therapy will found to be the most effective intervention for smoking cessation

**References**

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