A disease of congestive heart failure

Education, Learning

Interdisciplinary Care for Congestive Heart Failure

Mr. Johnstone is a 75-year-old man who was recently admitted to the hospital accompanied by his grandson. The patient weighs 98KG and has a height of 175cm which leads to a body mass index (BMI) of (31. 9). This specific BMI is a clear indicator that Mr. Johnstone suffers from obesity. During the time of admission, the patient had complained about having experienced breathing challenges for the past one and a half weeks which had so far worsened. Also, Mr. Johnstone complained about fatigue, orthopnea, swelling of the leg and paroxysmal nocturnal dyspnea. Medical records have indicated that Mr. Johnstone has been admitted to this hospital twice for the same problem within the last two years.

For the past six years, the patient had been diagnosed with hypertension. It has also been revealed that the patient has been on medication before his current visit. The medication comprised of metoprolol (50gms), simvastatin (40gms), aspirin (150gms), amlodipine (10gms) and frusemide (40gms). Mr. Johnston has not had any allergic reactions to these medications or any other that he has used in the past. In addition, he does not use any other traditional medicine.

The current examination has indicated that the patient had an average body temperature. The recorded blood pressure at the time of admission was 159/100 mmHg and was further characterized by varying pulse rate that averaged at 85beats per minute. Mr. Johnstone had pedal oedema that extended to his knee region even though he seemed alert during the assessment process. Also, there was no sign of rhonchi, but still the patient

had bibasal crepitation. An x-ray image indicated that Mr. Johnstone had cardiomegaly while the echocardiogram proved that the patient had hypertrophy on his left ventricle.

Laboratory and Diagnostic Tests

`Laboratory tests were aimed at investigating the blood count, urea, and electrolyte test, liver functioning as well as the cardiac enzyme. All these tests were done as soon as the patient was admitted to the health facility. The results were as shown in the table below.

Test conducted Results obtained Expected results for a healthy individual

Creatinine concentration 68. 8ml/min

Prothrombin test (INR test) 1. 04 Below 1. 1 (normal time for a person’s blood to clot)

Activated Partial Thromboplastin Time (APTT) test 59. 4 seconds (slightly high) 25-35 seconds

Echocardiography Sinus tachycardia present (the rates were greater than 100 bpm) Sinus tachycardia absent

Electrocardiogram (ECG) test performed on the first day T-wave inversion Normal T-wave which is always upright with an amplitude of 5mm for the limb leads and 15mm for the precordial leads.

Random blood glucose Normal Normal

Some blood stains were detected in the urine during the urine test. The echocardiography results further revealed that the patient had sinus

tachycardia. The APTT test was recommended due to the evidence of blood in the urine of the patient. However, the tests revealed that Mr. Johnstone did not have any problem with his prothrombin or thrombin which means that the clotting process was fine. The normal blood sugar also reveals that the patient does not have diabetes. The T-wave inversion is an essential clinical laboratory value that has to be considered (Brady, 2014). The inversion implies that there is a possibility Mr. Johnstone has myocardial ischemia, myocarditis, myocardial contusion (caused by trauma), old pericarditis or central nervous system (CNS) disease that might have been caused by an injury. The presence of sinus in the tachycardia means that Mr. Johnstone has sinus tachycardia. This condition can lead responsible for rapid heart rates, shortness of breath, dizziness, fainting, chest pains and headaches.

Basing on the results, it is clear that Mr. Johnstone suffers from congestive heart failure. The most frequent signs for this condition include faulty heart valves, myocarditis which is evident in the inverted T-wave and high blood pressure. Other symptoms include shortness of breath (dyspnea) and rapid weight gain among others.

Nursing Diagnosis

Condition Potential Complications Nursing Intervention Collaborative Intervention

Shortness of Breath 1. Heart failure which can lead to death

1. Brain damage
2. Development of symptoms

3. Correct positioning of the patient to enhance respiratory functioning
4. Providing a gas mask
5. Inhaled bronchodilators
6. Involve a physical training expert
7. Involve nurses
8. Involve a cardiologist

High Blood Pressure 1. Heart failure that can lead to death

1. Stroke
2. Dementia 1. Regularly monitoring the patient's blood pressure
3. Reduce the amount of sodium in the patient's diet
4. Uphold activity restrictions 1. Involve a cardiologist
5. Involve a dietician
6. Involve nurses

Diarrhea 1. Dehydration

1. Quick loss of weight and muscles
2. Hypokalemia 1. Rehydration
3. Administering anti-diarrheal medication
4. Good sanitation 1. Involve nurses
5. Incorporate social workers in cleanliness
6. Involve a dietician in prescribing medicine

Mr. Johnstone is a 75-year-old man who has been admitted after being diagnosed with congestive heart failure. The main aim of hospitalization is to provide a conducive environment as well as the care that will facilitate the recovery process. Mr. Johnstone has been prescribed three types of drugs to help enhance the heart problem. Benazepril (Lotensin) was orally

administered at a dosage of 5mg. The therapeutic function of this drug is to treat mild to moderate hypertension. 25 mg of Metoprolol was orally administered once a day. The therapeutic function of Metoprolol is to lower blood pressure by reducing cardiac output. 2. 5mg of Zaroxolyn was given to the patient once a day. The therapeutic function of this drug is to reduce the systolic and diastolic. The process of caring for Mr. Johnstone required the efforts of a team with different areas of expertise. This ensured that all aspect of patient-centered care were incorporated into the treatment plan.