

Thalassemia in Children: A Case Report

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Abstract

Introduction: Congestive Cardiac failure (CCF) is an anomalous clinical condition involving insufficient heart pumping and filling Cardiac failure causes the heart to be unable to provide enough blood to meet the tissue's oxygen needs. Heart disease is the most common. Why older people are admitted to hospital This puts a huge economics stress on the health care system.

The dynamic, progressive nature of heart failure also leads to poor results, with hospital readmissions being the costliest About half of those patient die within 5 years after diagnosis.³ *Case presentation:* A male patient of 62 years from Arvi Naka was admitted to Medicine Intensive Care Unit (MICU), AVBRH on 11th January 2020 with a known case of Ischemic Cardiomyopathy which was diagnosed itself at AVBRH on 22nd October 2018 and a known case of diabetes and hypertension for 10 years. My patient was brought to AVBRH Emergency Unit on 11th January 2020 with a chief complaint of breathlessness for 2 days, sweating over both feet for 5 days and generalize weakness for 2 weeks. He was having difficulty in breathing for about 2 days which eventually become severe on 11th January 2020 evening and was brought immediately to AVBRH and got admitted on the same day. The patient was delirious and vomit two times on admission.

Keywords: *Congestive Cardiac Failure, dyspnoea, arrhythmia, tachycardia, ischemic cardiomyopathy.*

Introduction

Congestive Cardiac Failure (CCF) is a chronic progressive condition that effects on involves inadequate pumping and filling of the heart. It means that the heart cannot provide enough blood to fulfill the oxygen needs of the tissues. Since all heart failure does not include pulmonary congestion, heart failure is commonly called congestive cardiac failure.¹

Cardiac Failure is associated with various cardiovascular diseases, particularly untreated elevated blood pressure, coronary artery disease and myocardial infarction. Unlike other cardiovascular disease, incidence and prevalence of cardiac failure is on the rise. This is attributed to increased survival chance after heart attacks and rising population ageing.²

Heart is unable to pump when the myocardium cannot maintain a cardiac output adequate to satisfy the body's metabolic needs. Cardiac failure is extensively

classified into: - right-sided heart failure and left-sided insufficiency. At the same time, congestive cardiac failure can be left sided and right sided. The disease typically starts in the left side and then spreads to the right side if the left side remains untreated. Right-sided heart failure occurs when it becomes difficult for the right ventricle to pump blood to the lungs, blood pools up in the blood vessels, causing fluid accumulation in the lower extremities, abdomen and other vital organs. Left side cardiac insufficiency is categorized as systolic dysfunction and diastolic dysfunction. Inadequate blood drainage from the ventricles results in systolic dysfunction. Diastolic dysfunction (stiff heart syndrome) occurs when diastole does not adequately fill the ventricle.^{1,5}

Case History:

Patient Information: A male patient of 62 years from Aarvi Naka was admitted to Medicine Intensive

Care Unit (MICU), AVBRH on 11th January 2020 with a known case of Ischemic Cardiomyopathy which was diagnosed itself at AVBRH on 22nd October 2018.

Present Medical History: A male patient of 62 years old was brought to AVBRH Emergency Unit on 11th January 2020 with a chief complaint of breathlessness for 2 days, sweating over both feet for 5 days and generalize weakness in the last 2 weeks. The patient was having difficulty in breathing for about 2 days which eventually become severe on 11th January 2020 evening and was brought immediately to AVBRH and got admitted on the same day. The patient was delirious and vomit two times on admission.

Past Medical History: My patient had his first heart attack 5 years ago that is 2015 back in Mumbai, he was taken to hospital and got his second heart attack on 3rd October 2018 and got admitted to AVBRH and was diagnosed as Ischemic Cardiomyopathy and advised to do Coronary Artery Bypass Gas (CABG). He is a known case of diabetes and hypertension and is on medication for 10 years.

Family History: There are 3 members in the family, my patient, his wife and his son. The other family members do not have any communicable or hereditary disease except for the patient himself having diabetes and hypertension in the last 10 years back. The type of marriage of the patient parents and he himself and his wife is non-consanguineous marriage. The other family members are healthy.

Past interventions and outcome: My patient had his first heart attack 5 years back and his second heart attack on 3rd October 2018 and was diagnosed with Ischemic Cardiomyopathy at AVBRH and had done Coronary Artery Bypass Gas (CABG). My patient is also on medication for hypertension and diabetes for a period of 10 years. My patient is able to do daily activities of living without much interruption after his surgery on 2018 till the past few weeks of his admission to AVBRH. He went for regular medical check-up and is taking medicines regularly.

Diagnostic Assessment: Blood study shows: Haemoglobin-13.4%, TLC-54200cumm, Platelets-2.2lac/cum, Sodium-125mg/dl, Potassium-4.5mg/L, Creatinine-2.4gm%, Urea-70mg%. Chest X-Ray and Echocardiogram shows dilated left ventricle with a reduced ejection fraction.

Management:

- 1. Medical management:** Patient was treated with Tablet Cardivas/Carvedilol (Antihypertensive α/β adrenergic blockers) orally once a day with a dose of 3.125mg. oxygen was administered at 2l/hour till my last day of care.
- 2. Nursing Management:** Observed for cardiac rhythm, monitor vital signs closely. Keep patient safe from falls at risk of weakness. Provide pain management. Assessment of complications of CCF like arrhythmia, kidney damage, heart valve and rhythm problem and liver damage. Give health Education to patient and family members.

Discussion

A male patient of 8 years old from Aarvi Naka was admitted to Medicine Intensive Care Unit, AVBRH on 11th January 2020 with a complaint of breathlessness for 2 days, sweating over both feet for 5 days and generalize weakness for about 2 weeks. The patient is a known case of hypertension and diabetes mellitus and is on medication for 10 years. He was diagnosed with Ischemic Cardiomyopathy on 22nd October 2018 after his second heart attack at AVBRH and had undergone CABG. After admission to AVBRH he was then diagnosed with congestive cardiac failure and is under appropriate treatment and investigations were done. The patient is conscious and does not shows symptoms of gastric problem which he had at the time of admission after his hospital stay^{6,7,8}.

A study was done on, "Discharge Education Improves Clinical Outcomes in Patients with Chronic Heart Failure". It was done to assess whether there is improvement in patient condition after their hospital discharge related to health education given during their hospital stay and at the time of discharge. For this study, 223 systolic heart failure patients were selected using randomised controlled trial and they compared the effects of a one-hour, one-on-one teaching with a nurse educator to the standard discharge process. The samples were then contacted through telephone after 30, 90 and 180 days to assess any change or specifically improvements on the clinical events, symptoms and their self-care practices. The result shows that samples who were receiving health education during the hospital stay were having fewer hospitalised days and the death rate was much more reduced as compared to the others who were not receiving health education to about 75

percentage. Also, samples who are receiving education have lower risk of rehospitalization and their cost of care is much more reduced to 95 percentage. This conclude that the result of the addition of one-hour, one-on-one health education given to the patients with congestive heart failure by the nurse educator during their hospital stay and at the time of discharge has resulted in improved clinical outcomes, improved their self-care measures and reduced their chance for rehospitalization and cost of care to a high amount^{9,10}.

Conclusion:

The congestive heart failure is a chronic progressive disease that inhibits the functioning of the heart muscle. It is common among obese, hypertensive, diabetes, congenital heart disease and history of heart attack. If it is treated and diagnosed early, it can be controlled and the patient could live a normal life and practice the daily activities of living without much interruption. My patient does not have very much profound improvement after admission but his deliriousness and gastric symptoms at the time of admission were subsiding and the treatment was still going on till my last date of care.

Ethical Clearance: Taken from institutional ethics committee.

Source of Funding: Self.

Conflict of Interest: Nil.

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