Abstract: P1107

Immediate and Long-term survival outcomes of Patients Admitted with Decompensated Heart Failure with underlying Valvular Heart Disease

Authors:
S Harikrishnan¹, P Jeemon¹, G Sanjay¹, ¹Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST), Cardiology - Trivandrum - India,

On behalf: Chitra Heart Failure Study

Topic(s):
Acute Heart Failure – Epidemiology, Prognosis, Outcome

Citation:

Introduction: Valvular heart disease (VHD), especially rheumatic heart disease (RHD) is a common cause of heart failure in India. The data on long-term outcomes of these patients is scarce.

Objective: Was to collect data regarding clinical characteristics, in-hospital of patients with VHD in a tertiary care center admitted over a period of 10 years (2001-2010) and assess the long-term follow-up.

METHODS: Patients aged 18 years and above with valvular heart disease were selected from the hospital database of patients admitted in our centre with acute decompensated heart failure (ADHF) during the study period. Patients who had concurrent ischemic heart disease were excluded. Demographic data, risk factors, comorbidities, in-hospital outcomes and long-term survival were captured. The patients were grouped on the basis of left ventricular ejection fraction into Heart failure with preserved ejection fraction (HFpEF; EF > 50%), HF with mid-range EF (HFmrEF; EF 40-49%) and HF with reduced EF (HFrEF; EF <40%). Subjects who were admitted with HF due to other causes were included as a comparator for survival analysis (non-VHD)

Results: Of the 1502 patients who were admitted with ADHF during this period, 639 had VHD (42.5%). Of patients with VHD, 51.5% were females. Majority of the VHD patients had RHD (515 patients, 80.6%). Mean age of the population was 44.9 years (SD = 12.8 years). Patients with RHD were significantly younger than others (RHD = 43.3 years SD 12.5 years, non-RHD 51.5 years; SD 12.3 years, p<0.001). More than four-fifths had HF with preserved ejection fraction (HFpEF = 80.3%). Atrial fibrillation or flutter was present in 59.2% of patients. Anemia (Hb<10 g/dL), renal dysfunction during hospitalisation and active infective endocarditis were present in 6.1%, 29.6% and 6.7% of patients respectively.

The median duration of hospitalization was 6 days (interquartile range 3-10) and during hospitalization, 113 patients (17.7%) died. The total time at risk was 3370 person-years (p-y) and 461 patients died during the study period with a median survival time of 4 years. The survival of patients with VHD and others (non-VHD) grouped on the basis of EF is provided in figure 1. Patients with VHD with reduced ejection fraction (valvular cardiomyopathy) had the worse prognosis among the groups. (p<0.001)
Immediate and Long-term survival outcomes of Patients Admitted with Decompensated Heart Failure with underlying Valvular Heart Disease

Authors: S Harikrishnan¹, P Jeemon¹, G Sanjay¹, Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST), Cardiology - Trivandrum - India, On behalf: Chitra Heart Failure Study

Abstract: Immediate and Long-term survival outcomes of Patients Admitted with Decompensated Heart Failure with underlying Valvular Heart Disease

Introduction: Valvular heart disease (VHD), especially rheumatic heart disease (RHD) is a common cause of heart failure in India. The data on long-term outcomes of these patients is scarce.

Objective: To collect data regarding clinical characteristics, in-hospital of patients with VHD in a tertiary care center admitted over a period of 10 years (2001-2010) and assess the long-term follow-up.

METHODS: Patients aged 18 years and above with valvular heart disease were selected from the hospital database of patients admitted in our center with acute decompensated heart failure (ADHF) during the study period. Patients who had concurrent ischemic heart disease were excluded. Demographic data, risk factors, comorbidities, in-hospital outcomes and long-term survival were captured. The patients were grouped on the basis of left ventricular ejection fraction into Heart failure with preserved ejection fraction (HFpEF; EF > 50%), HF with mid-range EF (HFmrEF; EF 40-49%) and HF with reduced EF (HFrEF; EF <40%). Subjects who were admitted with HF due to other causes were included as a comparator for survival analysis (non-VHD).

Results: Of the 1502 patients who were admitted with ADHF during this period, 639 had VHD (42.5%). Of patients with VHD, 51.5% were females. Majority of the VHD patients had RHD (515 patients, 80.6%). Mean age of the population was 44.9 years (SD = 12.8 years). Patients with RHD were significantly younger than others (RHD = 43.3 years SD 12.5 years, non-RHD 51.5 years; SD 12.3 years, p<0.001). More than four-fifths had HF with preserved ejection fraction (HFpEF = 80.3%). Atrial fibrillation or flutter was present in 59.2% of patients. Anemia (Hb<10 g/dL), renal dysfunction during hospitalisation and active infective endocarditis were present in 6.1%, 29.6% and 6.7% of patients respectively.

The median duration of hospitalization was 6 days (interquartile range 3-10) and during hospitalization, 113 patients (17.7%) died. The total time at risk was 3370 person-years (p-y) and 461 patients died during the study period with a median survival time of 4 years. The survival of patients with VHD and others (non-VHD) grouped on the basis of EF is provided in figure 1. Patients with VHD with reduced ejection fraction (valvular cardiomyopathy) had the worse prognosis among the groups. (p<0.001)