Waiting List Mortality in Patients Listed for Heart Transplant in Thailand – A Single Centre Experience

Nithi Tokavanich¹ Sarinya Puwanant² Sarawut Siwamogsatham² Pat Ongcharit¹ Vichai Benjacholamas³ Aekarach Ariyachaipanich²

¹Department of Medicine, Faculty of Medicine, Chulalongkorn University, ²Division of Cardiology, Department of Medicine, Faculty of Medicine, Chulalongkorn University, ³Department of Surgery, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand

Background: In Thailand, treatment for end-staged heart failure to bridge patients to transplant is limited. This may affect the mortality rate among patients waiting for heart transplant. Nonetheless, the waiting list mortality in patients listed for heart transplant in Thailand is unknown.

Objective: The aim of this study was to identify the mortality rate of patients awaiting heart transplant and identify predictors of outcomes.

Methods: We conducted a retrospective analysis of all patients who were listed for heart transplant at King Chulalongkorn Memorial Hospital between 2011 and 2015. Patient characteristics, treatments and mortality were collected. T-test, Fisher’s exact test and survival time analysis were used for analysis.

Results: There were 54 patients listed (mean age 38±15.4 years, mean left ventricular ejection fraction 30±18.7%). Dilated cardiomyopathy was primary diagnosis in 21 (38.8%) patients. Most patients, 32(52.9%) were listed as outpatients. From the total of 54 patients, 4 (7.4%) died and 35 (64%) underwent transplantation, while 6 (11.1%) delisted and 4 (7.4%) remained listed with a mean duration on waiting list of 161 days. With univariate analysis, we found that inotrope used (HR 40.2, 95% CI 3.5-454.1), inpatient status (HR 40.2, 95% CI 3.5-454.2), lower serum albumin (HR 1.66, 95% CI 0.6-4.3), and UNOS status 1 (HR 17.4, 95% CI 1.01-299.4) were associated with a waiting list mortality (p < 0.05).

Conclusion: In this single center experience, the mortality on a waiting list for heart transplant is 7.4%, which is lower than the reported rates in western countries. This is likely explained by different patient characteristics, urgency status, and donor availability.

Keywords: Heart transplant, Heart failure, Transplant list, Thailand, Mortality