

MORTALITY ON THE WAITING LIST FOR TRANSCATHETER AORTIC VALVE IMPLANTATION. A SINGLE CENTER EXPERIENCE FROM VANCOUVER, CANADA

i2 Poster Contributions

Georgia World Congress Center, Hall B5

Monday, March 16, 2009, 9:30 a.m.-10:30 a.m.

Session Title: Endovascular and New Technologies

Abstract Category: PCI - Valvular; Atrial Fibrillation Therapies

Presentation Number: 2505-438

Authors: *Edgar Tay, Eve Aymong, Namal Wijesinghe, Fabian Nietlispach, Ronen Gurvitch, DA Wood, Ronald Carere, Jian Ye, Anson Cheung, John Webb, St. Paul's Hospital, Vancouver, BC, Canada*

Background: Patients with severe symptomatic aortic valve stenosis (AS) at high surgical risk can now be treated with transcatheter aortic valve implantation (TAVI). The mortality of patients on the waiting list for this procedure is not well characterized. We assessed the incidence and predictors of mortality of patients waiting for TAVI in a large single center experience.

Methods: All accepted candidates for TAVI from January 2005 to July 2009 were included. Baseline clinical, echocardiographic and invasive characteristics were recorded. Waiting time was defined as the time from decision to implant to the time of death or TAVI. Univariate and multivariate predictors of mortality were determined.

Results: During the study period, 267 patients were accepted for TAVI. Mean age was 81.5±8.4 years (53% males). Most were in NYHA II or more and 30% CCS II or more. Mean glomerular filtration rate (GFR) was 56.3±23.7ml/min. Mean aortic valve area and gradient was 0.63±0.17cm² and 44.3±16.0mmHg respectively. 27% of patients had pulmonary hypertension (PH) (mean pulmonary arterial pressure>25mmHg). Mean left ventricular ejection fraction (LVEF) was 53.9±14.4%. The median waiting time for TAVI was 106.8 days. Twenty-eight (10.5%) patients died while waiting, of which 60% occurred suddenly. Impaired LVEF, reduced GFR and associated pulmonary hypertension were univariate predictors of mortality. PH was the only independent predictor of mortality in multivariate analysis.

Conclusions: Patients declined conventional surgery and accepted for TAVI are at high risk of dying while awaiting treatment. The presence of associated pulmonary hypertension is an independent predictor of mortality and should be considered during triaging.