Valvular Heart Disease

FUNCTIONAL MITRAL VALVE REGURGITATION IN A HIGH RISK ELDERY COHORT AND THE ROLE OF OPTIMAL MEDICAL THERAPY

ACC Moderated Poster Contributions
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Background: The optimal therapy for functional mitral regurgitation (FMR) is not wellb established. Our goal was to define predictors of death, length of stay (LOS), and re-hospitalization in an elderly cohort (age>70) of high risk patients with FMR, and to assess if optimal medical therapy (OMT) had an impact on outcomes.

Methods: This was a retrospective review which identified 148 patients with FMR in a clinical database. The predictors we assed included FMR severity, heart failure, OMT, liver failure, Chronic Obstructive Pulmonary Disease (COPD), patent bypass graft, peripheral/cerebral vascular disease, dialysis, discharge age, left ventricular ejection fraction (LVEF), and creatinine.

Results: COPD was the main independent predictor of death at one year (OR 5.11[95%CI 1.9-13.6] p=0.001). Adjusting for all other variables, the increased LOS was 0.5 +0.2 days for patients with moderate-severe FMR (p=0.023). Independent predictors of re-hospitalization included liver failure, peripheral vascular disease, dialysis, and discharge age. OMT did not have an impact on reducing mortality, LOS, or re-hospitalizations.

Baseline Demographic Data and Mortality Data n=148	
Mean Age at Discharge from Index Hospitalization (Years)	78 +5.63
Male Gender (%)	55%
LOS From Index Admission (Days)	3.5 + 4.27
Death Within 1 Year of Discharge For Index Admission (%)	18%
Death Within 1 Year with Mild FMR (0-1) (%)	2.7%
Death Within 1 Year with Moderate-Severe FMR (2-4) (%)	21%, **p=0.04
Patients under OMT* (%)	54%
Mean LVEF (%)	35 +15 %
FMR Grade (0-4)	0 (1.4%)
	1 (25%)
	2 (19.6%)
	3 (31.2%)
	4 (22.3%)
NYHA*** Class (1-4)	1 (6.3%)
	2 (26.1%)
	3 (49.7%)
	4 (18.3%)
COPD (%)	33%
Liver Failure (%)	6%
Mean Creatinine (mg/dL)	1.4 + 0.9
Peripheral Vascular Disease (%)	25%
Dialysis (%)	9%
History of Myocardial Infarction (%)	12%
History of Coronary Artery Bypass Grafting (CABG) (%)	11%
History of CABG with at least one occluded graft (%)	83%
History of Atrial Fibrillation (%)	63%
History of Stroke (%)	3%
Data are expressed as a number (percentage) or as mean + standard deviation *OMT (ACE Inhibitor or Angiotensin Receptor Blocker, Beta Blocker, and Diuretic) **p<0.05 considered significant ***New York Heart Association	

Conclusions: Patients with moderate-severe FMR had increased mortality at one year.

OMT did not have a significant impact on overall outcomes. Severe FMR was a significant predictor for increased LOS. Our results indicate that the patients at highest risk are those with COPD and can help risk stratify patients who could benefit from invasive strategies to treat FMR.