EP2

Aortic Paravalvular Regurgitation after TAVI Is Associated with Higher Mortality

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Background: Aortic stenosis (AS) is increasing in incidence with the aging of the population. Transcatheter Aortic Valve Implantation (TAVI) provides a therapeutic option for patients with severe AS who are high risk surgical candidates. Paravalvular aortic regurgitation (PAR) is frequent after TAVI but is usually mild. Moderate-to-severe regurgitation occur and may have clinical consequences.
Objective: The purpose of this study was to assess the clinical and prognostic significance of paravalvular regurgitation after TAVI.
Methods: Seventy six patients who underwent TAVI at our center from 9.2008 to 10.2011 were studied retrospectively. Echocardiography before the procedure and following the procedure but prior to discharge were reviewed. Aortic regurgitation was assessed using semi quantitative methods.
Results: Among seventy six patients who underwent TAVI seventeen (22%) had significant (moderate and more) APR and fifty nine (78%) had non-significant (less than moderate) APR. There was no significant difference in the baseline characteristics of the two groups (age, sex, EF, AVA, AV gradient, IHD, pre-procedural AR). The mortality rate was higher in the group with significant APR as compared to patients without APR (35% versus 8%, p-0.009).
Conclusions: Significant paravalvular aortic regurgitation after TAVI is associated with increased mortality. Long term follow up is critical to further define the impact of AR on clinical outcome. Until these data become available every effort should be made to prevent and treat this complication.