

Characterisation of patients with concomitant cancer in significant aortic stenosis

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Background: There is an increasing incidence of cancer worldwide, while aortic stenosis is the most common valvular heart disease. However, management of aortic stenosis (AS) in patients with cancer remains poorly understood. The presence of concomitant AS in patients with cancer may confer added morbidity and mortality.

Methods: We studied 727 consecutive patients with index echocardiographic diagnosis of moderate to severe aortic stenosis (aortic valve area $<1.5\text{cm}^2$). These patients were divided in patients with or without concomitant cancer. Baseline clinical and echocardiographic parameters were compared by appropriate univariate analyses. Kaplan-Meier curves were constructed to compare mortality, admissions for congestive cardiac failure and aortic valve replacement between the groups.

Results: Eighty-five (11.7%) patients had concomitant cancer with moderate to severe AS. Of those, 45 (52.9%) had active cancer. The group with

cancer was similar in terms of age, body mass index, clinical comorbidities compared to the group without cancer. AS severity and echocardiographic profile was similar except for a lower LVIDd (43.6 ± 12.0 vs $47.4\pm8.9\text{mm}$, $p<0.001$), and LV mass index (103.1 ± 43.2 vs 116.6 ± 41.5 , $p=0.005$). There was higher mortality in the cancer group (log-rank 17.6, $p<0.001$), similar incidence of admissions for cardiac failure (log-rank 0.58, $p=0.446$) and a lower incidence of aortic valve replacement (log-rank 3.96, $p=0.047$) compared to the group without cancer. Patients with AS who received cancer treatment did better than those that did not receive cancer treatment.

Conclusion: Concomitant cancer in patients with moderate to severe AS was associated with increased mortality, and a lower incidence of aortic valve replacement. Further studies are warranted to investigate the role of valve replacement in patients with cancer.

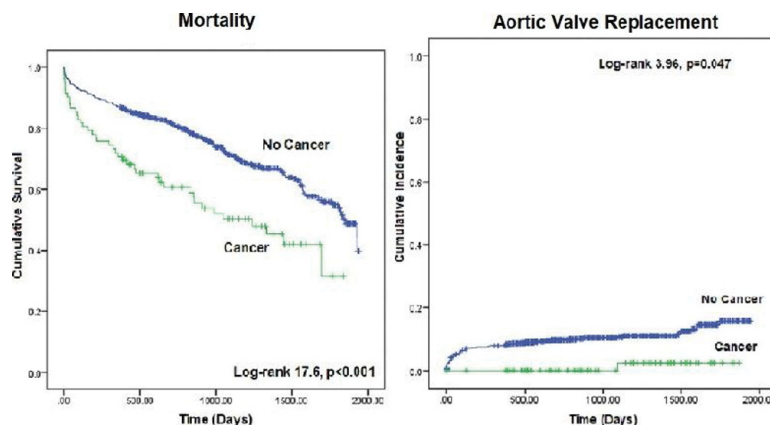


Figure 1