Abstract: 2210

Symptomatic severe aortic stenosis: predictor factors and outcomes

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Topic(s):
Valvular Heart Disease – Epidemiology, Prognosis, Outcome

Citation:

Introduction: The natural history in aortic stenosis (AS) is a slowly progressive process which begins as aortic sclerosis and subsequently progresses to severe opening restriction, conditioning symptoms development. At this time, surgical aortic valve replacement is strongly recommended due to its poor prognosis.

Purpose: Evaluation of predictor factors of symptomatic severe AS and its prognostic impact.

Methods: Single center retrospective analysis of patients’ data accompanied in cardiology consultation due to severe AS diagnosed between 2015-2016. Data was collected regarding clinical and echocardiographic parameters to determine predictor factors of stablished endpoints.

Results: 150 patients were reviewed, mean age 76.6±9.0 years, 72% males. 68.7% had hypertension, 42% dyslipidaemia and 32.7% diabetes. 64.7% of the patients had symptoms attributable to severe AS: 48% dyspnoea, 12% angina and 4.7% syncope. 7.3% of the patients were hospitalized due to acute heart failure in this context. Comparing echocardiographic parameters between symptomatic versus non-symptomatic patients with severe AS, symptomatic patients had higher values of aortic maximum velocity (4.5±0.5 vs 4.3±0.4 m/sec, p < 0.001) and mean gradient (50.1±12.7 vs 43.2±7.7 mmHg, p < 0.001). There were no significant differences regarding mean aortic valvular area neither left ventricle ejection fraction. At univariate analysis, predictor factors of symptoms attributable to severe AS development were: hypertension (odds ratio (OR) 2.044, confidence interval (CI) 1.004-4.161, p 0.049), anaemia (OR 0.420, CI 0.207-0.851, p 0.016), aortic maximum velocity (OR 5.497, CI 2.014-15.000, p 0.001) and mean gradient (OR 1.073, CI 1.029-1.118, p 0.001). At multivariate analysis, only aortic maximum velocity showed to be independent predictor factor of symptomatic severe AS (p 0.012). Hospitalization and all-cause mortality rates (respectively: 9.3 vs 9.4%, p 0.975; and 25.8 vs 34%, p 0.305) did not differ between groups.

Conclusion: In patients with severe AS, aortic maximum velocity showed to be the only independent predictor factor of symptoms development, however it was not associated with an increased hospitalization or mortality rates.