Severe asymptomatic aortic stenosis: management of a patient

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Introduction: Calcific aortic stenosis (AS) is a prevalent and worrisome healthcare problem. Patients with symptomatic severe AS have an indication for aortic valve replacement. Indication for operation remains controversial in patients with isolate, asymptomatic severe AS. North American and European guidelines agree on a class I indication for operation in patients with a reduced left ventricular ejection fraction (<50%) but are inconsistent for patients with other disease or comorbid factors. The natural history of aortic stenosis should be better quantified to improve understanding of benefits and harms of intervention vs conservative treatment. Aim: searching for latest knowledge about management of asymptomatic, severe AS and identification of highest risk patients that will have benefit from early intervention.

Materials and Methods: The meta-analysis of literature search 2370 observational studies with total of 4075 patients comparing an early surgical treatment strategy with watchful waiting. The primary end point was all-cause death during long-term follow-up. Meta-analysis was performed on the association of prognostic indicators with the composite of death or aortic valve intervention found in multivariable models.

Conclusion: The optimal management strategy for asymptomatic patients with severe aortic stenosis remains unclear. Data suggest that many patients with asymptomatic severe AS develop an indication for aortic valve intervention, and their deaths are mostly cardiac but not only sudden. Meta-analysis indicates that intervention was associated with a significant reduction in all-cause mortality during follow-up. Variables associated with mortality-related outcomes indicates that prognosis is significantly worse if global longitudinal strain or valvulo-arterial impedance is present even with a preserved LV function, if AS is more severe as measured by higher valve gradient and lower valve area, and if atherosclerotic risk factors, such as dyslipidemia or diabetes, are present.

LITERATURE

