Low-flow low-gradient AS; to Whom and When

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After transcatheter treatments emerged as an alternative to surgical treatments for aortic stenosis (AS), the decision-making process for various patient groups has become crucial. Only severe AS patients at rest were initially considered for Transcatheter Aortic Valve Replacement (TAVR) and Surgical Aortic Valve Replacement (SAVR). Recently, even those not severe at rest can be candidates for these interventions. Hence, accurately identifying and selecting these patients is one of our primary objectives. This shift is attributed to an aging population and the success of Transcatheter Aortic Valve Implantation (TAVI).

Guidelines highlight that Low-flow, Low-gradient AS can be a challenging issue. These not-severe at rest patients would be the candidates for TAVI when true severe is diagnosed with dobutamine stress echocardiography, as these patients within this category face a poor prognosis. Timely intervention for them is of paramount importance. We can distinguish true severe AS from pseudo-severe AS using the dobutamine stress echocardiogram.

Furthermore, there are heart failure patients with moderate AS. While the effectiveness of interventional treatments for moderate AS remains uncertain, successful TAVI would alter heart failure management strategies. For these cases, the dobutamine stress echocardiogram can guide and modify the treatment approach.