PROGNOSIS OF PATIENTS WITH ISOLATED SEVERE AORTIC STENOSIS: ARE OUTCOMES SIMILAR FOR ALL PATIENTS WITH AN AORTIC VALVE AREA LESS THAN 1.0 CM²?

Poster Contributions
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**Background:** Current guidelines define severe aortic stenosis (AS) as an aortic valve area (AVA) <1.0 cm². However, it is uncertain if all of these patients have the same prognosis. We hypothesized that AS patients with an AVA 0.8-0.99 cm² would have a more favorable prognosis than those with an AVA <0.8 cm².

**Methods:** Patients with isolated, severe AS and ejection fraction >55% were examined over a 1 year period. Patients with an AVA <0.8 cm² (n=155) were compared to those with an AVA 0.8-0.99 cm² (n=105) and 1.0-1.3 cm² (n=70). Patients with an AVA 0.8-0.99 cm² were considered high risk if they had a high mean gradient (>40 mmHg) or a low stroke volume index (<35 mL/m²) regardless of gradient. The endpoint of this study was a combination of death from any cause or valve replacement at 3 years.

**Results:** The mean gradient (50 vs. 33 vs. 19 mmHg, p<0.001) was highest in patients with an AVA <0.8 cm². The combined endpoint was achieved in 71% of AS patients with an AVA <0.8 cm² compared to those with an AVA 0.8-0.99 cm² and 21% of moderate AS patients (p<0.001). When AS patients with an AVA 0.8-0.99 cm² were divided into high and low risk groups, the high risk group (n=39) had outcomes (69%) similar to those with AVA <0.8 cm², while low risk patients (n=66) had a better outcome (41%) at 3 years.

**Conclusion:** Patients with an AVA 0.8-0.99 cm² are classified as severe but their prognosis is better than those with an AVA <0.8 cm². The outcomes of these patients can be better defined when they are stratified by gradient and/or stroke volume index.